ABSTRACT OF

An Address

TO

GRADUATES IN MEDICINE IN THE UNIVERSITY OF EDINBURGH.

Delivered on August 1st, 1895,

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GENTLEMEN,—It is my pleasant duty and privilege to convey to you the congratulations of my colleagues and of the University on the attainment of your degrees and upon the varied honours and distinctions bestowed to-day. To those of you who have attained the degree of M.D. we offer our sincere congratulations, not only in that you have elected to reach the fullest medical standard of our University, but that so many of you have contributed Theses of high value to medical science. It is no small thing to be graduates of this University, to share the inheritance of so many noble traditions, and to belong to the school of so many eminent men of the past and present. You are no mere licentiates of a medical corporation, but members of a University which in the past has been, as we trust it will continue to be in the future, distinguished in all branches of learning. During long years the combined influence and mutual interaction of the various Faculties have moulded and elevated the teaching of the whole. Many of you have directly profited by the teaching of professors in other Faculties than that of medicine, but even those who have not done so must have felt their influence. Remarkable as is this University in the long combination of distinction in medicine with that in divinity, law, philosophy, and science, it is hardly less unique in its relations to the citizens of this noble and beautiful city. For long years, in place of antagonism between town and gown, the University has been amongst the chief glories and most dearly cherished objects of solicitude of the inhabitants. The fathers of the city, its eminent citizens, its wealthy men, have vied with one another to foster and develop it. Apart from higher interests, the results of their munificence and care are seen to-day in the noble buildings, both of the University and the Royal Infirmary, in which you have received your training. You owe, then, a debt to this city as well as to the University, which should be an incentive to each one of you to see to it that by your life and influence you do nothing to tarnish the fair fame of either. Nay, I would go further, and say that by all means in your power you should aim to promote the renown and success of the University, and to increase its material prosperity.

You have chosen a profession higher, perhaps, than any other, hardly excepting Divinity. It is full of noble traditions and memories, of possibilities of good to your fellow men, and of self-culture in all the highest qualities of man. You are rightly proud of your choice, and you will do well to retain your high ideal of your position and duty. All the more will you find this essential, since you will meet with many temptations to a lower standard in your own life. Still more will you find that your view is not shared by the majority of those around you. If you imagine that the public entertain a like view of the position and objects of your profession, you will soon be undeceived. In theory they may, and here and there some noble souls may recognise it, but for the most part your views and aims will be misunderstood. If, for example, you try to introduce sanitary improvements, you will probably be charged with a desire for notoriety, with ignorance of the common facts of life, and, above all, with a desire to raise the rates. Obloquy and suspicion will often be your meed, instead of gratitude and regard. Your monetary compensation, if any, will be grudged, and possibly be cut down below that of a common scavenger. The picture in Charles Kingsley's "Two Years Ago" is true to the life to this day. I speak from intimate knowledge in many instances. "A meddlesome conceited fellow," they will say, "fresh from college, full of new-fangled ideas." "As if we did not know what water we should drink, what air we should breathe; what we should do with our sewage, how we should feed and clothe our children," and so on. "Our fathers lived to a good old age without any of your new notions. What did for them will do for us." In such matters and a multitude of others you will find that the public, in spite of modern education and enlightenment, will oppose or thwart you. Even the diffusion of knowledge, the abundance of popular medical literature (so called), the ready access to medical works, due partly to their wide advertisement, will often act prejudicially to your treatment of patients, especially amongst the better educated classes. Indeed, it is often with them that the dangerous "little knowledge" is a serious barrier to successful treatment. To face such difficulties will often tax all your endurance and courage. Only by patience, tact, and forbearance can you succeed, whether in dealing with individual cases or with matters of wider interest. But, beyond this, there is one prevalent opinion which will come in to mar your influence. Money is, for the vast number of men, the first object in life; this, and not character or ability, is the standard of success. Do not be surprised if you are believed to have this as your first object. If it is really so I pity you. Not only may you fail utterly in your object, but you will be led into ways which must bring you loss of character. I mean real, not reputed character, and which may mar your success in the alleviation and cure of disease. It will lead to much bitterness and sorrow, to misunderstandings and quarrels with your medical brethren, to a lowering of the dignity of your profession.

[Professor Greenfield here emphatically cautioned his audience against making pecuniary success their main object in life. He urged on them the advantages of literary culture, and continued:]

In the practice of your profession you will necessarily be exposed to many temptations and meet with many difficulties. Time forbids any full reference to these, but there are one or two on which I would, before we part, say a few words of counsel. Every medical man is in a relation of peculiar confidence to his patients and their friends. There are some facts which he must know, both as to patient and family, which are sacred confidences. There are others with regard to which he must exercise a wise reticence, even to the patient himself or to his nearest friends. And no task is more difficult sometimes than to know when to speak and when to be silent. But beyond this there is one rule, too often forgotten, that a practitioner should never talk about his patients or their diseases to others. There are some obvious exceptions—where you may silence false rumours, for instance. But, as a rule, it is only at the request, or with the sanction, of the patient or his friends that you should speak at all. I cannot too strongly urge you to cultivate this rule of silence. Once break through it and you will find it hard to stop, but let it be known that it is your rule, and you will retain the confidence of your patients and the credit of your profession. You will often be tempted to speak so long as morbid curiosity and gossip, those two most inherent and devilish of common vices, exist; the guise of sympathy, the bad example of some prominent men, the prying eyes of the world, to whom no details of inner life are sacred nowadays, will tempt you; and you will be blamed if you will not divulge in private life what all the world considers itself entitled to know about public men. If you knew what one could tell of the mischief wrought by gossip, and especially by gossip founded on the sayings of men who should know the facts, you would shrink from all possible chance of doing such harm. Let your sense of honour guard your lips, and even keep the doors of thy mouth from the wife of thy bosom. When pressed for information it is a good rule to say, "It might do no harm for you to be told, but I am the last person to give you any information." I will not insult you by supposing that you will talk about your patients, with the idea that it will benefit your practice, by saying, for instance, that Lord So and So is under your care. It is not my business to teach you the arts of quackery. There are plenty of teachers. Not less difficult is it to know how to convey truth to your patients and their friends. Medical men are often blamed for concealing the truth from patients, even when asked directly. Much of this popular error arises from the fact that the presentation of truth is amongst the most difficult of acquirements.

The most perfect portrait is not that which presents every detail so that it can be studied with a microscope, but that which conveys the living likeness to the casual beholder. How few artists, how few writers, can succeed in this. It is no sophistry, but practical truth, that you must endeavour to convey the right impression as seen from the standpoint of your hearer. And in doing so you must keep in view the practical object for which you are consulted. To tell a man that he has heart disease may torture him with fears of sudden death, may lead him to give up his work and to live a life of misery and apprehension, when you know that he may live a long life and do active work, if due precautions are taken. It is your duty, and must be your anxious study, so to convey the truth that it may enter his mind in a way which shall give him hope and courage, and lead him to take such precautions and live such a life as will conduce to both health and happiness; otherwise, as one has often seen, he may, after long years of misery, discover that you in your eager desire to be truthful, and, perhaps, from over-confidence in your diagnostic powers, have done him more injury than his disease. How many cases of this kind one could relate did time permit. But I pass on to mention another closely related point. Bear always in mind that not only cannot the subjective and objective coincide, but that, from many points of view, a patient must always be regarded as aberrant. His mental condition cannot be yours. You see matters in that dry light of truth which Aristotle commends. The patient's fears, anxieties, wrong ideas, and speculations cannot be yours. He watches your every phase of expression; a puzzled or anxious look on your face may convey to him a sentence of death. Medical men, when ill, are the worst patients in this respect. One look may efface all that you can say. Hence no endowment is better in a doctor than a calm, cheerful, sympathetic manner, especially if combined with clearness, decision, and thoroughness in directions and candour in speech. "A merry heart doeth good like medicine," and is often a better sedative than all your drugs. Be anxious if you must, but let it be as a stimulus to more careful investigation, more watchful care in yourself. Beyond this, remember that sickness makes a man not himself. The higher his intelligence, the greater his activity, the wider his responsibilities, the more intolerable is sickness. It is not the physical but the mental pain which is hardest to bear, the risks of suffering to others, the apprehension of imagined or real woes. More than this, the mental and moral condition, like the pathological processes of disease, often revert to the type of early life. A child's ailments are often revealed by peevishness, a baby cries from hunger or pain oftener than from innate depravity. And a good, wise, and high-souled man, or a loving, patient, considerate woman may suffer tortures from the most trivial causes in sickness—e.g., a picture hung askew, or a spot on the wall. "We, then, that are strong ought to bear the infirmities of the weak." A medical man must exercise the fullest patience, consideration, sympathy, and control of temper. I have known instances where, forgetting this, perhaps himself wearied and overwrought in mind and body, a medical man has spoken harshly, or even has left a patient in advanced stages of disease, because of some imaginary slight. If you would avoid life-long remorse, apart from the discredit of such things to yourself and your profession, I beseech you to remember that "Better is he that ruleth his spirit than he that taketh a city," or distinguishes himself in diagnosis. In your relations to your medical brethren you may also meet with difficulties. One should perhaps pass these in silence, or speak with bated breath, in the presence of the public. But the fact that there are sometimes dissensions amongst medical men is but too well known, and the public judgment is warped by knowledge of the exceptions, and ignorance of the rule of brotherly feeling and action. That we are not only no better, but rather worse, than other men in this respect is a common belief. It is no answer to say that amongst those whose profession is higher, and whose creed is one of universal charity, the *odium theologicum* is a common and flagrant fact. Whatever may be our theory, however stringent our codes of medical ethics, it is unquestionable that ill-feelings and misunderstandings do too often mar our character, and will, I suppose, so long as we are human. Amongst the most frequent causes are those which relate to the distribution of patients, or rather clients. Medical practitioners, especially early in life, are charged with seeking to get the patients of others. The general idea that people are divided into the clients of Dr. A. and Dr. B.: that if Dr. A. is asked to see, and does see, anyone in a family which Dr. B. usually attends, he is a supplanter, to be scorned and avoided by Dr. B., and that Dr. B. may justly refuse to see anyone in that family again, even in an emergency, are rules sometimes supposed to govern practice. I do not say whether this is right or no, I record the fact. And there are too many thorny questions, too many intricate problems, which arise in connexion with such matters for me to attempt to deal with them. But this I will say, that I know of no rule of law, common or statutory, which empowers a medical man to claim an exclusive right to attend any man or his family, and that the public in general does not understand the high ground of privilege which is sometimes claimed. Believe me, gentlemen, the only real, sure, and lasting bond of union between medical man and patient is that of mutual confidence and respect. The exhibition of jealousy and distrust of the character and motives of one's fellow-practitioner is more likely to lead to loss of confidence than to its increase. Readiness to consult with others when desired is not likely to lose a patient. A man will not readily part with the services of one who has been in his confidence and has helped him or his family in times of trouble. Exclusiveness, suspicion, jealousy, evil report of one's neighbours, will only destroy confidence where it might otherwise be retained, and a patient may long to be released from a bondage which he did not seek. In such cases some people will go long distances to consult others, concealing or denying the fact that they have been under treatment, and often they do this to their own detriment, as well as to that of their medical man. I have often been astonished that patients have not enjoyed the advantage of consultation with medical men in their own neighbourhood, who could far better advise with their own medical attendant, and have found the explanation in the fact of mutual distrust and the idea that such a step would be resented. I have dwelt upon this point because I judge it to be one of the most urgent practical importance. But pray do not misunderstand me. It is one of the most stringent and primary rules that no medical man should under any guise, directly or indirectly, interfere with the conduct of a case which is under the care of another, unless consulted by him. Moreover, you will remember that I say this to guide your own conduct, not to influence your opinion of the conduct of others. There are salutary rules, established by long experience and concurred in by the wisest and best of our profession, which should regulate your conduct to your fellows, even if you cannot as yet see their justice or wisdom. Need I add that to comment upon the treatment or diagnosis of others, a habit we are all prone to, is not only a crime but a blunder. No man can judge of a case which he has not seen, and reports or rumours should never be trusted or be the ground of comment. Leave such criticisms to those who cannot know how deep is the anxiety, how great the difficulty, of the actual diagnosis and treatment of disease. You may think that in what I have said I have given a counsel of perfection unattainable by mortal man. But if you do not aim high now, you probably never will. And finally, gentlemen, let me commend to you the quality of *thoroughness*. Far more mistakes are made in diagnosis, and consequently in treatment, by want of thoroughness, than from ignorance. It has been our effort to ensure that as you have received a complete scientific training, so you should be thorough and methodical in all your clinical work. You cannot be too rigorous with yourselves in this. Cultivate the habit of thorough investigation in your earlier years, and you will gain a power of perception which will stay with you in the busier years of practice. There is genius in medicine as in other spheres, but the highest genius is in the power of careful and thorough attention. It is thus that the great men in all science have gained their renown. Every patient is a new and complex problem—not a mere "case"—with his own heritage of tendencies, his own habits, his temperament, his past life. Study all these with care, and you will develop powers which will make your success as medical men. It is not always the brilliant students who become successful and distinguished, but those who with good ability, assiduous care, and perseverance train what powers they have. Let those who have been depressed and daunted by their failures at examinations remember that the race is not always to the swift or the battle to the strong. Their difficulty in grasping facts or unravelling problems may have been due only to slow development, and they may discover new powers and attain high qualities by steady and persevering work.

ON THE RECOGNITION OF PERIPHERAL NEURITIS AND SOME POINTS IN ITS TREATMENT.[1]

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THIS paper does not pretend in any way to be a systematic treatise on the disease to which it refers. The subject has been dealt with so ably in many text-books and monographs that ample instruction upon all points awaits the investigation of the curious, and is doubtless already in the possession of my hearers. None the less I would urge that to every man who with certain opportunities thinks and works at one subject over a length of time there are likely to come ideas, not necessarily new or different from those of others who have laboured in the same field, but ideas at least with an emphasis originating in his mind and determined by his experience; and such ideas, when they possess him strongly, it is often useful to impart. Now, if it were granted—and I fear the admission is hardly justified—that most medical men were as well able to distinguish with certainty the presence and the extent of a peripheral nervous lesion as they are, say, to recognise a typical case of nephritis, it might still be said with truth that, whereas everyone has his mind open and directed to the possible presence of the latter in any given case, but little thought or apprehension is usually devoted to the former. Comparing the two conditions, it will certainly be conceded that there prevails a want of familiarity with the nervous disease. It is one of the ideas which experience has emphasised for me that a recognisable lesion of peripheral nerves is a very common thing—far more common than is often believed. It crops up everywhere, sometimes overlaid and hidden in a mass of more obtrusive symptoms; sometimes—as after typhoid fever, acute rheumatism, or influenza—the remnant of a disease more directly threatening life; sometimes a tedious complication to a surgical injury, often existing alone as a formidable and eventually fatal disorder. In all of these circumstances it may be, and often is, overlooked from a want of familiarity with the conception of it. It is with a sense of this fact that I have chosen to treat of the recognition rather than of the diagnosis of peripheral neuritis. I shall have to refer to the question of diagnosis as I proceed; but my purpose chiefly is to enjoin a vigilance, a preparedness of mind, by which the condition may be sought in all likely circumstances; to indicate some of these circumstances as experience has impressed them upon me; and finally, to make some remarks bearing upon treatment generally and in particular cases.

One of the commonest and most looked-for of the causes of neuritis is alcoholic excess. Yet in this the condition may be overlooked among the many disorders which, springing from the same source, are often present with it.

CASE 1.—I was asked to see a female patient reported to be in a state of coma and in danger of immediate death. There was a history of intemperance, but the patient had been for months an invalid and under supervision. Consequently alcoholic poisoning was not suspected. The liver was cirrhotic, and there were ascites, diarrhœa, and enormous hæmorrhoids. She was insensible when I saw her, but the lightest touch on the inflamed hæmorrhoids elicited an expression of pain. The breathing and the heart's action were good, and the imminence of death was not apparent to me. The comatose state, maintained during the day, gave place at night to periods of violent delirium, and both mental states were of a character which suggested alcoholism. I observed, also, that there was complete foot-drop, the knee-jerks were absent, and pressure upon the extensor surface of the forearm occasioned the expression of pain. The patient was receiving a few ounces of brandy to maintain her strength; I advised the withholding of alcohol entirely, and she made a partial recovery, but died a week later from pneumonia. An experience of this kind teaches one the necessity in such a case of looking closely at each of the symptoms, even when they are grouped together in a seemingly obvious and familiar whole. The possible bearing upon treatment of the inference then drawn needs little comment, especially when, as here, the administration of alcohol may be a large part of that treatment. Akin to this subject is one point upon which I am tempted to dwell. Outside and beyond the fact that patients are not always candid, and are accustomed diligently to conceal their moral infirmities from the physician whose help they have sought, there is a further difficulty of judgment based upon our own conception of what may suffice to produce a toxic state. It is true that in my own experience, where I have thought that I have eventually learned all the facts, it has generally appeared in cases of alcoholic neuritis that the imbibition of quantities of alcohol sufficient to satisfy the most exacting inquirer has been an antecedent. Nevertheless, I have my mind open to the belief that in certain persons a relatively small quantity will produce nerve symptoms which an inveterate dram-drinker will fail to develop.

CASE 2.—A young man aged twenty-two was brought to me by a colleague on account of a weak heart and a sluggish liver, which he was reputed to have. The liver was enlarged a finger's-breadth downwards, and the abdominal wall in this part was tender. The patient was flabby and anæmic, with a lack-lustre eye, and slow in his movements. He was the subject of habitual constipation. Physical examination of the heart revealed only a hæmic murmur. I had satisfied myself on these points when the patient observed incidentally that he had for some days been troubled with muscular rheumatism and with tingling and numbness in the extremities. There was tenderness of the muscles in the arm and leg and a degree of anæsthesia in the hands and feet. The knee-jerks were present. Notwithstanding this fact, and that the patient denied alcoholic excess, I gave the opinion that he was in an early stage of neuritis. He admitted a moderate indulgence in sherry between meals, and I further made allowance for a probable suppression or attenuation of the truth, but thought it likely that with a portal system blocked, a feeble circulation, a weak glandular organisation and defect of the emunctories, even moderate indulgence might have produced a toxic state. Within a week I was called to this patient. He was then unable to leave his bed; the knee-jerks were absent, to return slowly after four months, and in the meantime he passed through an extremely severe attack of alcoholic pseudo-tabes. I am greatly indebted to the good fortune which enabled me to observe this case from its earliest beginning. It is probably a unique experience. The ultimate result of my inquiries showed that in this case there was no need to assume a special susceptibility, and it may have been so with the female who was the subject of the first case cited here. I think not, however. I attribute great efficacy to what I may call the summation of causes in the production of toxic neuritis. This summation may be the summation of a single cause from a defective elimination of the poison, such as one may assume to exist where the hepatic function is impaired by an impediment to the circulation or by disease of any sort. Indeed, the usual association of liver trouble with habitual drinking itself suggests this, and the same association might seem to imply that there was generally at work the double factor of susceptibility to nerve poisoning, and of accumulated poison from defect of elimination. Amongst men, however, it is by no means those whose livers bear the heaviest traces of drinking who are most apt to succumb to neuritis, and in women, who are the commonest sufferers, neuritis usually precedes gross changes in the liver. Among women it is perhaps the anæmic and ill-nourished who offer the least resistance, and amongst men it is decidedly those of feeble circulation and what is often described as an inherited liver. I believe that in some of these even small habits of tippling may be thoroughly effective. It is difficult to apportion the factors in causation, but we are all led by our own views in judging a cause, and may sometimes question the effect without due regard to other evidence. According to present knowledge the most important element is always, of course, individual susceptibility, and occasionally a light may be thrown upon this indirectly. There is what is called a family of neuroses, and there is a class of allied states which seem to entail a special proneness to defect of nervous vitality. I can recall a remarkable instance in which the

[1] A paper read before the West London Medico-Chirurgical Society on May 3rd.

allied neuroses had committed a terrible onslaught on a single family.

CASE 3.—On March 4th, 1891, a young man aged twenty-four came to me at the Hospital for Epilepsy and Paralysis. He was obviously in great extremities of poverty. He had still about him an air of gentility and a kind of refinement, which in another class we sometimes ascribe to good breeding. There was some uncertainty, too, about his name. When young he had been in hospital for vertigo and again for something the matter with his eyes. For the latter he had been given cod-liver oil and quinine. His complaint when I saw him was wasting, weakness and painful cramps, occasional giddiness, but in particular a remarkable hyperidrosis, which rendered him unfit to follow his occupation. A few questions made it plain that the family history was full of neurotic incident, and the young man's father sent me in writing the following remarkable statement. One grandfather died from apoplexy; one grandmother from asthma, the other grandmother from phthisis; the father himself had spinal paralysis; the mother was then an inmate of a woman's hospital, and had been subject to hysteria major; one brother had hip disease, and another lupus; one sister was phthisical; one brother died from fits; a sister died from phthisis; a young brother was delicate; one sister was hysterical; and, lastly, one brother was reputed to be healthy. This brother I had a curiosity to see, and at my request he attended. I was little surprised to find that he inherited his full share of affliction. He exhibited exophthalmic goitre in a pronounced degree and subsequently came under my care. One of a family such as this is readily the subject of any form of nervous collapse. I could cite from my notes many instances of such summation of susceptibility. I choose one in which for epilepsy and paralysis the evidence, though weighty, is more scattered.

CASE 4.—A man aged forty-two attended at the Hospital for Epilepsy and Paralysis in October, 1894. He had imbibed great quantities of spirits—as was, he said, the custom in his trade. He had never had syphilis. He had been ill off and on for four years, and this he attributed to influenza. His actual condition dated back six or seven weeks, consisting in weakness and wasting of the legs, cramp in the calves, foot drop, and absence of knee-jerks. I believed it to be a case of alcoholic paralysis. The patient had had writer's cramp for twelve years. The dynamometer registered 50 with the right hand and 70 with the left. He had had four children, who died at from two to four years of age—two from phthisis, one from diphtheria, the cause of death of the fourth not being known. The writer's cramp, the early deaths from phthisis and diphtheria—probably neuritis—indicate a soil in which the seed of destruction would quickly grow. More interesting, perhaps, as a variety of summation of cause are the instances in which two or more toxic agents are known to coöperate. The influenza poison and gout are both well-known toxic agents.

CASE 5.—A man aged forty-eight lately consulted me. He had never had gout, but on both sides his family abounded in the diathesis. His father and mother had fallen victims to it. Two years previously he had had an attack of influenza, and when sufficiently recovered to get up he staggered in walking. There were now exaggerated knee-jerks and ankle-clonus, and it was probable that this was the remnant of a myelitis. There had been foot-drop on one side, atrophy, and tenderness, and there was still a slight degree of reaction of degeneration to attest a peripheral lesion. The coexistence of lead poisoning with gout is too common to need notice. Indeed, I think that the gouty toxine can be found to be active alone or with other agents in a great number of cases of neuritis amongst men. Its efficacy by itself is beyond dispute, though very often overlooked.

CASE 6.—A man aged fifty-four was seen by me in August, 1887. He had formerly been subject to acute attacks of gout. For some years he had escaped these, in consequence, as he believed, of taking an Italian nostrum in the shape of pilules, which are well known to be therapeutically inert. He was an obstinate man, and it is a question whether his immunity was a result of suggestion. When I saw him his arteries showed extremely high tension, the optic discs were anæmic, and he was in a state little short of melancholia. The left foot dropped; the electrical reactions showed degeneration in the peroneal nerve, and the knee-jerk on that side was absent. This lasted for a considerable time; delusional insanity developed, and recovery ensued after the lapse of two years. There may be noticed here a fact well worthy of attention—the concurrent affection in a characteristic manner of the central and peripheral nerve elements. We are too prone to parcel out our conceptions of disease and to pigeon-hole them each in its small compartment. Nature works otherwise, and if we would study her processes we must follow her methods in this. The physiologists, in a commendable appreciation of mathematical forms, used to speak of the nerve cell as the "neurological unit." There is a tendency nowadays to larger views; and the so-called unit is the neuron. This is a nerve cell with all its processes—the aborescent processes as well as the nerve fibre—all the parts which together with the cell are mutually interdependent. The extension of terms is decidedly a step in the right direction; but, after all, the neuron is but an anatomical unit. In pathology it is unsafe and inexpedient to confine one's attention within even this limit, for we cannot know the extent of functional interdependence. It is probable that a collapsing nervous system yields at points along its whole length. It may be too much to say that every poison which causes peripheral degeneration produces also a characteristic effect upon the higher levels of the nervous system, but an association of this kind is common and is well worthy of close study. The psychical type will often throw a useful light upon a case of peripheral paralysis. It will sometimes afford the key to difficult diagnosis, and suggest a line of treatment. The troubled sleep and stupor alternating with a timid, yet violent delirium which bespeaks alcohol may under some circumstances be misinterpreted. If, however, as it often happens, this is accompanied by peripheral paralysis, the nature of the poison is clearly evident. The first case quoted here is an instance in point. So with case 6, only that the series of events was more complicated. The vascular changes from retention of uric acid might be deemed sufficient to produce the symptoms by anæmia, but so limited a paralysis is not known to occur from anæmia. Again, the pallor and attenuated arteries of the ocular fundus, bespeaking malnutrition of the brain, might well bring about psychical disturbance; but such disturbance in anæmia is apt to be placid, to decline into torpor. There was here what may more justly be regarded as an exaggeration of the irritability and discontent of the gouty paroxysm. I am led by these remarks to refer to the question of hysteria complicating organic nervous lesions. The coincidence should always be looked for, and in some cases may be said to be almost inevitable. Such cases are principally those in which a strong neurotic propensity is known to exist.

CASE 7.—I was asked to see a woman in good circumstances and of a markedly neurotic family, who for some months had been bedridden with paralysis and exaggerated tremors of the lower limbs. The disease had been taken to be disseminated sclerosis. The arrangement of zones, and patches of anæsthesia and hyperalgesia, led me to believe that the paralysis was what is called "functional." There was, however, a contracted pupil and wasting of the thenar muscles on one side, and these gave a reaction of degeneration. The distribution of pain also on that side of the trunk suggested a local irritation; and a careful examination showed mobility and displacement of the first dorsal vertebra—a condition very competent to cause these symptoms. To my mind it became at once probable that the more equivocal symptoms—paraplegia, tremors, &c.—were functional rather than due to a separate systemic lesion of the spinal cord. The subjects of lead poisoning are peculiarly apt to be also hysterical, and it is most necessary to distinguish between the organic and the functional in such paralysis as may be present.

CASE 8.—A lad aged seventeen was lately under my treatment at St. Mary's Hospital. He was unable to walk from paresis of the legs—had incomplete wrist-drop—a paralysis of the whole of one upper extremity and of the muscles of the chest-wall on that side. He was much emaciated. Errors of sensation were in the direction of hyperæsthesia. The patient was very emotional. There was also marked buccal anæsthesia and clavus. The use of electrical tests showed that a small part of the extensors of the forearm was alone directly implicated. The lad had been exposed to poisoning by lead, and to this the organic paralysis of the extensors was attributed; the rest was put down to hysteria. He became too ill to attend, and some time later I encountered his body by chance on the post-mortem room table. He had died from tuberculous disease of the intestines.

In this connexion—the association of functional with organic nervous disease—one is reminded more forcibly than at other times that the term "functional" is only provisional, and that the condition which we call "functional" must properly be regarded as one in which an organic change, lesion or defect, though certainly present, escapes our present means of investigation. We cannot imagine disease without a definite material cause. Now, if this be so, organic disease itself must differ in respect to the evidence upon which its character is supposed to be based—must differ in respect to the certainty with which we know that two different instances have the same causation and are one and the same thing. Now of all diseases of the nervous system the degeneration of the peripheral nerves, which we call "peripheral neuritis," is the most definite, certain, and recognisable entity. Take, for instance, a cerebral tumour or a patch of sclerosis in the spinal cord. Such a thing is known partly as an induction from certain physiological facts, partly because certain symptoms have been found in a number of instances to have been present during life where these conditions were found post mortem, and the certainty that they will be again found in a given instance depends upon the precision of the symptoms. Take another instance of another class—Bright's disease. The vascular and retinal changes, the dropsy and malnutrition so constantly present, are very distinctive. But how greatly the certainty of a diagnosis is increased by the discovery of albumen in the urine! And it is a notable thing that, whereas we can refer the other symptoms with sufficient plausibility to the changes defined in every case where a necropsy is made, we have not even a respectable theory, though we have many speculations on the subject of albuminuria. The cause of the second sound of the heart is a matter of dispute, yet its modifications afford the surest evidence and measure of disease, and we call them "physical signs." Albuminuria, too, may be called a physical sign, and its value as evidence depends upon the constancy with which it occurs in nephritis. Reverting to organic nervous disease we have symptoms or reputed symptoms in all; in peripheral neuritis alone we have a physical sign of absolute and unerring accuracy, a sign obtainable at will, which bespeaks degenerative changes in the nerve fibre as plainly as if the fibre had been stained and mounted and submitted to examination under the microscope. Hence, if I am right in my contention that the disease is common, formidable, and infinitely more amenable to treatment than is Bright's disease, it is surely incumbent upon medical men to be provided with the means of a certain diagnosis. It would be a matter of shame—thanks to examining boards, an impossibility—for any practitioner to be ignorant of the ordinary tests for albumin; how many are there who are versed in the electrical tests for degenerating nerve and muscle? I am not going to speak of the symptoms of peripheral neuritis—many and unequivocal as they are—but a word upon its physical sign, the reaction of degeneration, cannot be avoided.

The "reaction of degeneration" is the term used to describe the behaviour under electrical stimulation of a muscle or considerable group of muscle fibres when the motor nerve of the latter is undergoing destruction or repair. Under such circumstances this reaction is never wanting. Moreover, the pathological character of the condition to which it testifies is always essentially the same, and admits of no kind of ambiguity. The condition may originate at the central cell or at the terminal organ, or it may constitute a lesion in the course of the nerve fibre; but wherever it begins there will be from that point downwards a definite morbid change in the neuro-muscular elements, a change which has been exhaustively studied and which is very well understood. To be able to recognise this change at any moment during life is clearly a matter of great importance, and this can be done by the intelligent use of an electrical current. There are many kinds of current, and there are differences in the physiological effects of each. We are concerned here with two only—the two which are of most general use in medicine. These are the constant or galvanic and the induced or faradaic current. The physiological effects of these two currents differ remarkably. It may be said that they have only one such effect in common—namely, that stimulation of a healthy nerve or muscle by either will cause a contraction in the muscle, and since this effect is produced only in health it is, from a practical point of view, of secondary importance. When used as a test to ascertain the condition of the nerve by watching the effect of the current upon the muscle, these two forms of electricity must be carefully distinguished, must be thought of as two different things. This will appear presently. Now as to the manner in which a current can be made to stimulate a nerve. It is impossible in the living body to imitate the physiological method of stimulating the excised muscle-nerve preparations upon which the facts of electrotonus have been worked out. The depth of the nerve beneath the skin, the diffusion of the current, the uncertainty of its path amongst the tissues, prevent the application of a current having a known direction in the nerve. Nor is this needed. What is imperatively required is that we shall be able to bring the nerve or muscle being examined under the influence of the current, and that in the case of the constant current we shall be quite certain of submitting the nerve to the separate action of the positive or the negative pole as we wish it. This is necessary because the effects to be observed are polar effects and differ characteristically with the pole used. It is always requisite that both poles be attached to the body, so as to bring the latter within the circuit. To give precision to the pole used locally this is carried by a small electrode, while the other, the indifferent electrode, is a very large one and is placed at a point anatomically as far as possible from the part under investigation. In most cases the indifferent electrode is placed on the episternal or epigastric region. When this is done the path of the current may be represented by a cone, and in proportion to the length and sectional area at the base of this cone—in proportion also to its nearness to the apex—will be the certainty that the nerve or muscle is submitted to the unmixed influence of the pole used locally, of the electrode which represents the apex of the cone. So much it is necessary to say for the sake of clearness, and, it being premised that we can apply a faradaic or a constant current and obtain the effect of either pole at will, the rest may be stated shortly. I will add that the question of polarity does not arise in the case of a faradaic current, for the poles are not distinguishable. I will take this current first and dispose of it. In health, if a faradaic current be applied to any part of a motor nerve or muscle, a tetanic contraction results. In disease, degeneration—and the so-called "inflammation of nerves" is merely a degeneration—a faradaic current wherever applied will fail to give a contraction. Thus the entire absence of faradaic contraction in a muscle is a certain sign that there is a lesion somewhere in the neuro-muscular tract—that is, somewhere not higher than the group of cells in the anterior columns of the spinal cord. Let it be noted well, however, that the presence even of a powerful contraction under faradaism does not exclude such a lesion. In many cases, and in peripheral neuritis especially, there may be, side by side and intimately mingled in the same muscle, healthy fibres with others undergoing change; the contraction of the first will then mask the inactivity of the latter, and in such a case a negative test can prove nothing. Again, the absence of a faradaic contraction may mean, besides degeneration, the entire destruction and absence of nerve or muscle substance, and for this reason, also, it is indispensable to have a test which will distinguish the two conditions. The test which would best meet these ambiguities would be one in which there would be no contraction only when the nerve or muscles were destroyed, while the contraction in health and in degeneration would offer a recognisable specific difference. Such a test is afforded by the constant current. Given a healthy nerve and muscle, the stimulation of either with either pole of the current causes a quick, lightning-like contraction whenever the current is made or broken, and this contraction occurs with a weaker current when the negative pole is used than when the positive is used. Let it be noted now what happens if the nerve or muscle has been injured and is undergoing degeneration or repair. In the first place, one cannot stimulate the nerve at all. Its faculty for transmitting the stimulus is gone. To obtain any result the electrode must be placed directly over the muscle. When this is done and the current made, the positive, not the negative, pole is found to be the more efficient stimulus. Further—and this is by far the most significant difference—the contraction is no longer quick and lightning-like, but, slow, long-drawn, and exhibiting a remarkable vermicular progress. If in a muscle there are both healthy and impaired fibres, the difference between the two contractions is invariably evident to the practised eye, and the presence of the slow vermicular movement, even in a few fibres, is absolutely diagnostic.

From these remarks it is clear that to predicate a reaction

of degeneration from the behaviour of a muscle to the faradaic current alone is a delusion and a fallacy; yet I have repeatedly seen the inference drawn by accomplished and skilful physicians. The fact must justify so long an exposition of what should be a familiar topic. Obviously all this applies only to motor nerves, and, equally obviously, sensory nerves are liable to the morbid change under consideration. I have elsewhere urged that a great number of cases of sensory neuritis are undoubtedly treated and spoken of as "neuralgia," and I have insisted upon the expediency of making a clear distinction between the two. Since, however, most peripheral nerves, if not entirely motor, are mixed nerves, and since the most limited display of the reaction of degeneration is conclusive, the test is almost invariably applicable.

CASE 9.—I was asked to see a young woman who more than a year previously had had influenza, and since then had suffered severe pain in one shoulder. She had been given a host of the usual remedies for neuralgia without effect, and the constant pain had been telling severely upon her general health. Examination revealed tenderness radiating backwards and forwards from the point of emergence of the sensory branches of the circumflex nerve upon the surface of the deltoid, and scattered fibres of that muscle were found to exhibit the reaction of degeneration. A neuritis of the circumflex was thus made evident, and local treatment, including the application of the positive pole of a constant current, effected a cure in a few weeks. A case of this kind, in which the nutrition of a large and superficial muscle is implicated, is one in which, with the proper means, an error of diagnosis is impossible. Without such means—that is, without the careful application of electrical tests—I think that anything like a certain and positive conclusion is unobtainable. In the case of the deltoid particularly, and of any muscle so situated in regard to a large joint, the presence of paralysis, atrophy, and muscular tenderness would not decide the matter, for these conditions are found constantly attending even slight lesions of the joint. The case seems to illustrate very well the importance of what I have called the "physical sign." It suggests, however, another reflection. I think it is a matter of the gravest doubt whether neuralgia—that is, a central affection declaring itself by local pain—can ever be restricted to the distribution of a single nerve. The trigeminal nerve may be an exception, and so posssibly are other cranial nerves whose ganglionic origin is distinct; but I would hesitate to speak of a circumflex neuralgia. The predominance of pain in the area of sensory nerves, while there is no obvious improvement of motor function, should not be construed as neuralgia but a diligent search should be made with electrical tests in the region of motor nerves derived from the mixed trunk. There are conditions in which neuritis of sensory nerves greatly prevails over that of motor nerves, and in which pain is more prominent than anæsthesia. Syphilis seems to be one of these, and it is this fact, probably combined with neglect or inefficiency in the use of the constant current as an aid to diagnosis, which has led some to doubt whether a syphilitic neuritis exists.

CASE 10.—A married woman nearly forty years of age was sent to me for treatment. There was a history of typhoid fever and of malarial fever, but no questions were asked on the subject of syphilis. The present illness dated from a time about four years previously, when for twelve months or so the patient used to vomit immediately on taking food, but had no nausea. About this time there was a sore within the mouth, afterwards extending to the outside of the lower lip and leaving scars. From the description of this sore and the appearance of the scars it seems to have resembled herpes. The sore was seen by several very eminent authorities, and I gathered that the idea of syphilis was not entertained. There was no syphilitic skin lesion when I first saw the patient. The remaining facts I transcribe from my notes.—Nov. 14th. Present condition: Severe headache constantly, with pain on pressure over place of emergence of supra-orbital nerve on both sides. Pain over deltoid and on pressure over trunk of circumflex nerve; pain on pressure in two spots over the dorsal spines; pain down the triceps, over the external condyle, and on pressing the radial nerve against the radius there is pain in the distribution of the nerve. All this is symmetrical, but of much greater degree on the left than on the right side. The pain is greatly intensified periodically at night, between one and two o'clock. The spleen is enlarged and tender. Electrical examination shows faradaic excitability, normal everywhere, but preponderance of the positive stimulus in the extensors in the left forearm, and a somewhat sluggish contraction there (slight R.D.). The patient has lately had cramps in the left thigh. Nov. 21st: The patient has attended daily except yesterday. The treatment has been the prolonged application of the anode over the tender points. On the first occasion the points over the circumflex nerve were alone omitted, and it was only in that part that pain continued. Headache, which had never failed for six months, completely disappeared. The first night the patient woke at the usual time—about 2 A.M.—but had no pain. This exemption continues. When a current of 10 to 15 milliampères is passed with the anode over the tender points of the supra-orbital nerves the sensation is described as pleasant and soothing. On one occasion the deltoid was rubbed vigorously in addition to electrification. That night there was severe pain in the region of the circumflex nerve, and this was afterwards gradually subdued by the anode. Ichthyol ointment is also rubbed in.—Nov. 22nd: Pain in the deltoid has ceased and given place to stiffness. Investigation of right arm shows tender points in (1) the lower part of anterior triangle of neck, (2) over emergence of circumflex in the quadrilateral space, (3) over insertion of deltoid, (4) in triceps posteriorly over the musculo-spiral groove, (5) over external condyle, (6) at the interval between the internal condyle and olecranon, and (7) beneath the belly of the supinator longus. There is intense pain on pressing the radial nerve between the tendon of the supinator longus and the bone. This pain radiates down the back of the wrist and hand. The radial nerve can readily be felt and is probably enlarged. There is severe paroxysmal pain in the left side of the thorax corresponding to three intercostal spaces. Treatment continued. Dec. 2nd: Two days ago all pain in the limbs had ceased, and there remained only occasional pain and tenderness on right side of forehead. One day's treatment was then omitted. For the first twenty-four hours there was no pain. In the next, pain recurred but its periodicity was changed; it occurred in the evening. There was pain in the left shoulder at bedtime, but a good night's rest. Patient has also been taking quinine and arsenic for some days. Dec. 12th: No treatment for four days. Patient had a chill two days after her last visit, and the same night had intolerable pain in right arm and head—less in left arm. Pain in head was relieved by camomile fomentation. Those pains better, but still persist. There is great pain on pressure over the head of the radius in front, also over a point about the middle of the posterior edge of the deltoid, over the acromion and over the olecranon. Tender points in scalp as before. All these points and the arm generally treated with anode. Dec. 13th: Pain relieved absolutely till bedtime, when there was some uneasiness in the arm, but a good night followed. In the morning some headache, more diffused, and tenderness had shifted down so as to underlie the eyebrow. The electrical reactions were taken very carefully. There is in both arms, especially the right, a marked preponderance of A.C.C., but the contractions were not obviously sluggish. Stimulation of the radial nerve with anode in any part of its course where superficial caused a tingling sensation all through its distribution, and a vigorous contraction in the extensor carpi radialis and in the forearm extensors. Treatment of painful points with anode as on yesterday and previous days. Dec. 14th: R.D. in extensors still more marked. The motor point of the extensor carpi radialis, observed yesterday, appears to be in one point in the course of the radial. This point is on the radial side posteriorly and about three inches above the styloid process of the radius. Treatment as before. Dec. 15th: Last night before bedtime excruciating pain in right arm, localised chiefly in extensors in forearm and at a point on the posterior edge of the acromion. Patient, according to advice, took seven grains of quinine in phosphoric acid. Pain was greatly relieved almost directly, but lasted some hours though much diminished. Little pain this morning. No headache last night. To-day there is a red papular rash in irregular patches, like those of herpes on the point and upper aspect of the shoulder. Colchicin and lithium bromide are now taken regularly and the limbs are kept warmly wrapped. Dec. 20th: On 16th severe attack of diarrhœa and nausea, for which no cause assigned, lasting three days. Given chlorodyne, sulphuric acid, and quinine. No pains. Dec. 21st: Much pain in right arm last night. March 2nd: Patient has been away. Pains in right arm as before. Left free from pain. Has now a sore fissuring the angle of

the mouth on the right side and extending outwards on the inner side of the cheek. This is decidedly specific. Patient says that she considers this to be the same condition that she had before coming under my notice." All other treatment was suspended, large doses of biniodide of mercury were given, and a cure shortly took place.

I have related this case at great length for various reasons. In the first place, it sets out a great part of the local treatment which I find useful in neuritis, and I shall conveniently refer to it when dealing with treatment. Then it is shown by the final event—a specific sore—and the cure obtained by the use of biniodide of mercury to have been, at least, in part, a syphilitic condition. If the history of malaria, the periodicity of the pains, and the efficacy of quinine introduce an element of uncertainty, the instance is *pro tanto* a good one of the summation of cause of which I have spoken above. That the condition was a neuritis, not a neuralgia—as it had been, and generally would be, termed—is plain from the morbid reaction in the forearm extensors; and the comparatively inconspicuous share of motor implication bears directly upon the question as to whether syphilis does cause peripheral neuritis or not. I think the answer should be that it does very commonly, but that it tells most often and most obviously upon the sensory nerves—just as the trophic lesions of syphilis so often involve the skin alone. It would be safe I believe, in all cases to treat similar pains in a syphilitic subject as peripheral, but if certainty of diagnosis is wanted it can be had only by a very careful investigation of the muscular state of the patient. The examination may have to be repeated often and often, or the morbid change, from being so slight, will escape detection. In this case every drug that is supposed to relieve pain had been tried ineffectually; two only gave any relief—namely, quinine in large doses and mercury. The latter cured the disease when its nature was made known; the former relieved paroxysms without curing the disease. It is therefore that I suggest an added cause of the neuritis in malaria which the patient had had years before, but which had not since troubled her; that, however, the condition was essentially syphilitic I doubt not at all. The paroxysmal thoracic pain mentioned under Nov. 22nd is remarkable. I have met with it elsewhere. I quote from another case, that of a man who admitted syphilis and who infected his wife and children. Severe "pains were in the right arm and forearm, in the back below and beneath the left scapula and extending forward to the sternum in the situation of the seventh, eighth, and ninth ribs. In the latter place the pain came on in spasms of great severity, and could be induced at any time by standing up." A hyperæsthetic zone having a similar distribution occurs sometimes in hysteria, and there the condition was called "pleuralgia" by Briquet. The difficulty of determining the peripheral character of the lesion is not confined to those cases in which it affects the sensory nerves of the skin and other superficial parts almost exclusively. One meets with cases of severe muscular pain in which the cause appears to be of the same nature without anything comparable to the same wide-spread degeneration that an equal degree of pain would almost certainly imply in, say, alcoholic neuritis. Such cases are sometimes mistaken for functional cramp. The importance of recognising their true character depends upon the fact that they are infinitely more tractable than functional cramp and more dependent on treatment. They occur chiefly in girls of a nervous organisation. I have two under my care at present. In neither is there any cutaneous pain or anæsthesia. One was attributed to the exercise of polishing work.

CASE 11.—The other is the case of a young woman aged twenty, who plays the violin, and she referred her pain to this. She has suffered for four years. The pain is of a dull, aching character, situated in the muscles on the extensor surface of the right forearm and radiating to the back of the second and sometimes of the first finger. It occurs spontaneously, but follows almost any movement, and in particular that of the bow in playing. At first the movements of supination and pronation were directly painful, and at that time there could be felt in the situation of the orbicular ligament an elastic swelling and crepitus. I inferred that there was inflammation about the ligament and was not surprised to find that the sufferer had been a too enthusiastic player of the game of lawn-tennis. I could at first find no undoubted evidence of muscular degeneration. The treatment I adopted was to rub in to the forearm vigorously a preparation of iodide of sodium with soap liniment over the site of a patch previously vesicated; then to apply the positive pole in this part to promote absorption of the drug by cataphoresis, and at the same time to allay pain. The limb was then swathed in pine-wood wool, bandaged, and carried in a sling. This treatment answered well. When the pain disappeared it became necessary to counteract a slight degree of flexor contracture by more energetic galvanism and faradaisation. In rubbing the extensors firmly I noticed that when pressure was made on a certain point a short, sharp contraction affecting only the second extensor tendon took place. This directed me to a closer inspection of that part of the extensor communis, and I found that there was a galvanic, as there was a mechanical, over-excitability, and all the evidence of a degenerative reaction in that limited part of the muscle. Why pain was referred from the corresponding part of the muscle to the finger itself I am unable to explain, but medicine is full of such mysteries, and the best profit is gained in observing the facts.

I have dwelt too long upon points which, however interesting, may seem to have but little practical import. It has been my object, however, to try to direct attention to the everyday and commonplace character of an affection which is much mixed up with the incidents that are encountered in practice, and I have endeavoured to point it out by an association with other circumstances which constantly engage attention. I have omitted discussion of the symptoms which are more apparent and more familiar, and I have confined myself to that which is most decisive but least generally available for want of knowledge. It seems to me deplorable that there should be a class of specialists devoted to electro-therapeutics. It is not so in other countries, and the example of such men as the Remaks, Eulenburg, Erb, Charcot, and a great number more, who have held a knowledge of the physiologically established principles of medical electricity to be but a small part of the equipment of an educated physician, may well be followed amongst us. In time it certainly will. For the present I would urge that diseases of the peripheral nervous system, but little complicated, growing every day in importance, and constituting, as they do, or should do, a large part of the responsibility of the practitioner,—I would urge that these, at least, should be taken from the domain of any specialist whatever. If it is clear that the means of recognising them is within everyone's reach, it is no less true that they are of all diseases the most manageable and the most amenable to treatment. Still, just as it is but seldom possible to form a true estimate of their nature and extent without the use of electrical tests, so it is always impossible to treat them adequately without employing electrical methods. These are not the conditions which lend themselves to the manipulations of the charlatan, and in which the *vis medicatrix naturæ* throws its cloak over the blunders of the incompetent. Nor is there anything empirical—otherwise then all medical knowledge is empirical—in the procedure best adapted to their cure. This procedure is based upon the accepted conclusions of the most eminent physiologists; it partakes of the strength of Pflüger's laws—it must be modified by circumstances within the observation of the physician, and if he will take the trouble to inform himself concerning the agent he has to use he will be repaid by an ever-varying and absorbing interest in the problems to which he has at least a serviceable clue. In speaking of the treatment of peripheral neuritis I would desire it to be understood that there is no specific. Nothing must be neglected. The primary underlying cause will be met by any of a host of remedies, therapeutical or hygienic; diet, abstinence, the application of a suitable temperature, change of climate, of occupation, and other circumstances in the environment,—all or any of these may have to be enjoined; and if I pass them over it is only for want of time and because they are already sufficiently appreciated.

I come to speak of one remedy which bears in a manner more direct than any other upon any disease whatever upon the state of degeneration in the peripheral nerves—I mean the use of electricity. And as in dealing with electrical tests I had to point out that there was the broadest distinction between one current and another, so here it must be enforced that there is even greater difference in their application therapeutically. It is a common notion that electricity medically considered is an agent to make the muscles jump. I have already said that this, the most obvious, is the least valuable effect of the current, and that the current which produces it most forcibly—the current which tetanises, the

interrupted current is of least account in medicine. Nevertheless, it is the best known and the most used by the haphazard practitioner who buys his instrument and obtains instruction in its use from the maker. The product "electricity," thus loosely thought of, is most often derived from the crude source of an induction apparatus. It is perhaps because a coil makes a noise when it is working and relieves the operator of the necessity of being able to check its work by its physiological effects, also because by its noise and pain and tumultuous contractions which it causes it satisfies both the operator and the subject that something is being done. It is chiefly, no doubt, because its use requires no knowledge, while that of the constant current demands a little. Whatever the reason, this confusion of ideas on the subject of electricity is as unfortunate as it is discreditable at the end of the nineteenth century. I can recall an instance of a poor woman suffering from convulsive tic who was daily subjected to the torture of a strong interrupted current, and this over a period of six months. The pain might have been—and in other hands afterwards was—allayed by the judicious application of the positive pole of a constant current, but the other applied to the periphery of sensory nerves is initially a source of pain, and in painful states an intolerable aggravation. From the point of view of treatment, as of diagnosis, the constant current is very much the more important, and this invaluable property of soothing pain is intimately concerned in the production of its beneficial effects. A good instance of its power in this way may be seen in the notes of Case 10, which I have purposely transcribed at considerable length. I am not disposed to enter into a discussion of the manner in which the positive pole of a constant current controls pain. It is sufficiently well understood, and is a deduction from the principles of electrotonus. I will content myself with quoting from Dr. Michael Foster's "Text-book of Physiology": "Besides their theoretical importance the phenomena of electrotonus have also a practical interest. ..... If the current be of adequate strength the irritability may be so much lessened that nervous impulses cannot be generated in that part of the nerve, or cannot pass along it. Hence by this means the irregular contractions of muscles known as 'cramp' may be abolished. Similarly, by bringing into a condition of an electrotonus a portion of a sensory nerve in which violent impulses are being generated, giving rise in the central nervous system to sensations of pain, the impulses are toned down or wholly abolished and the pain ceases. So, on the other hand, we may at pleasure heighten the irritability of a part by throwing it into katelectrotonus. In this way, properly applied, the constant current becomes a powerful remedial means." This statement is amply borne out by clinical experience. There are eminent authorities who discountenance the use of electric currents in what are reputed to be inflammatory conditions of the nervous system. The current, according to them, is an irritant of the inflamed nerves. Now, applying this dogma to any particular case, there are two assumptions which need to be made good. Let that particular case be peripheral neuritis. Is it an inflammatory state? It is necessary to recall the very recent date of our acquaintance with this condition and to allow for preconceived ideas derived from an unproved analogy with inflammatory states of the spinal cord. When Charcot taught that the lesion in anterior poliomyelitis was primarily one of the motor ganglion cells it seemed natural that changes quite similar in the axis cylinder process should be called inflammatory also; but Roger, Dana-chino, Roth, and others have assailed Charcot's position with success, and it is now practically abandoned. The more recent works of pathologists upon peripheral neuritis make in a similar direction, and it is probable that where inflammation is a factor it is inflammation of interstitial and vascular structures, not an inflammation of the nerve substance itself. It is safer to regard the affection of the latter as a degeneration, attended with a loss or perversion of function. And, again, is there any proof that an electric current can under these or other circumstances be a nerve irritant? Absolutely none. Possibly the phenomenon of tetanic contraction under the influence of an interrupted current has led to the ill-considered supposition that a disturbance takes place in the nerve comparable to that in the muscle. Such a supposition is far from justified. The most careful experiments have failed to show that any heat is generated in a nerve when even a very strong current is carried through it, and the structure of the nerve as we know it is such as to preclude the idea of considerable molecular changes during the time it is exercising its function. In all this the nerve and the muscle present the broadest possible contrast. The contraction is a muscular, not a nerve, phenomenon. It takes place not in virtue of nerve energy, but in virtue of its transformation into muscular energy, not in the nerve, but in the muscle. Finally, in states of degeneration an interrupted current is altogether inert at the periphery—sufficient proof, surely, that it at least is not irritant. In such states it is the constant current only which has any effect. It is true that a contraction can be caused by its use in a particular way, but also a very strong current can be applied to a motor nerve, either in health or disease, without causing a contraction. The statement, as quoted above, of an eminent physiologist will serve to indicate broadly the ways in which it may be made serviceable. Its special application to clinical purposes is necessarily the subject of an elaborate technique of which the fundamental principles are the excitant action of the negative and the sedative action of the positive pole. I can testify to the efficacy of electrotherapeutics applied by this light to the treatment of neuritis, and I cannot urge too strongly my conviction that the time to resort to electrical treatment is the earliest and most acute stage of the disorder. I know that I am at variance with all but a very few upon this point; but if others will abandon the attitude of timidity and inaction for one of intelligent interference they will certainly obtain convincing results.

I have said more than once that in the disease under consideration the interrupted current has no effect on the periphery, and I have tried to make it clear that I mean no muscular effect. I believe it is quite otherwise in regard to the nerve. This current is there also without effect in the sense of any kind of reaction at the periphery, but that its effect upon nutrition at the centre is very considerable there is ample evidence. In the acutely painful condition called "sciatica" the strongest induced currents are borne without inconvenience. So in the remarkable state known as "anæsthesia dolorosa" the current so painful in health is usually tolerated freely; and in both it does good. In a sciatica which has been allowed to become chronic strong faradaisation should be the routine treatment. While upon this subject I will call to mind that a characteristic of peripheral neuritis is generally a limitation of the structural changes to the extreme ends of the nerves. I have tried to show that the morbid terminations can be influenced in almost any way by the appropriate use of galvanism, and I repeat that the comparatively healthy central parts are still subject to stimulation by either current. This fact should serve as an important guide in practice.

I will conclude these remarks by disclaiming the pretension that any one set of measures is sufficient. The greatest share of success will be attained by him who neglects nothing. I have spoken chiefly of electricity because it is the least known, the least used, perhaps in this country, the most despised of therapeutic measures, whereas in regard to disease of the peripheral nerves it also is the most useful, the most directly applicable, the most indispensable of all. Bearing in mind, however, the accessibility of the part affected, its remarkable vitality, and the readiness of its response to changes in the environment, I find no occasion to dwell upon the multiplicity of resource that is possible in its treatment.

GENERAL OBSERVATIONS ON THE CONDITION KNOWN AS THE "TYPHOID STATE," WITH REFERENCE TO EXAMPLES IN MEDICAL AND SURGICAL PRACTICE.

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"Τὸ ὄνομα μηδὲν τῷ πράγματι ποιεῖ."—XENOPHON.

I.—MEDICAL.

IN attempting to arrange a few, fragmentary notes in connexion with my subject I am reminded of a remark which that astute essayist Sterne once penned: "When a man," said he, "sits down to write a history, though it be

but the history of Jack Hickathrift, he knows no more than his heels what lets he is to meet with in his way." Despite the lets, and irrespective of many imperfections, I shall endeavour to deal *seriatim* (1) with the meaning of the term "typhoid state" and what it exactly comprises; (2) with the circumstances under which the condition arises and its general causation; (3) with its clinical phenomena, its symptoms, and their course; and, lastly (4), with its prognosis and treatment.

1. *Definition and meaning of the term.*—The terms "typhoid state," "état typhoïde," "état adynamic," "typhoid condition," and "typhoid symptoms" so frequently mentioned in standard works on medicine and surgery and in the clinical reports of cases and patients in whom the condition supervenes during the course of some more or less serious illness, are not infrequently seen both in the wards of a general hospital and in private practice, so that any apology for reintroducing the subject need hardly be tendered (*vide* Murchison, Milner Fothergill, &c.). By the term "typhoid state" we understand a well-marked group or series of symptoms arising during the course of any disease in which "fever" (pyrexia), from whatever cause, is the essential feature of that morbid condition, and when that pyrexia is either excessive or long-continued, or both, the train of symptoms being "centralised" in the generic term "typhoid," which is in itself, without doubt, somewhat loose and indefinite, pathologically more or less inaccurate, and, lastly, not strictly logical. For in its history and etymology the word "typhoid"—derived from the Greek τῦφος (smoke or vapour) and εἶδος (resemblance of form, or likeness)—conveys the general idea that the condition is like or resembling typhoid fever, like the stupor seen in typhoid fever—and, that being so, it does not tell us anything precise regarding its true and exact nature—nothing essential about the condition itself, but merely that it is like, or has the appearance of something else, and so this lax term has imperceptibly come to convey in a somewhat vague and non-scientific manner the general idea that the condition is, comparatively speaking, identical with a condition first observed in typhus and in typhoid fevers. Briefly, the object of this paper is to endeavour to generalise the views and opinions regarding the so-called "typhoid state," and at the same time to state clearly and concisely its true pathological and clinical import in disease, and to summarise its characteristic features. In this country the late Dr. Charles Murchison and the late Dr. Milner Fothergill have contributed papers on this subject, while many interesting references are to be found in foreign literature: e.g., (1) in "De l'État typhoïde considéré dans les différentes Maladies";[1] in (2) "Typhoid Termination of Acute Inflammation";[2] and (3) in "De l'Autotyphisation par Excès de Fatigue et des Maladies Typhiques en général."[3] Relating to this subject, the following passage occurs in Finlayson's "Clinical Manual":[4] "It should be particularly remarked as necessary for the reconciliation of old and new terms, that the word 'typhoid' is not used here in the special and limited sense given to it by Louis and the French school of the present century, as a designation of enteric fever, but in that larger and more general meaning which it had from at least the time of Galen of 'typhus-like' (τῦφος εἶδος). Typhus, and most of its derivatives, including typhomania, are Hippocratic words used in a figurative sense from 'τῦφος' 'smoke,' as indicating the stupor which attends the graver kinds of fever, and, in the case of typhomania, the combination of stupor with restless delirium—exactly the functional contrast referred to above. The etymological facts are interesting, as showing how, even in the most remote period to which the literature of medicine extends, clinical phenomena which only receive their physiological interpretation from modern science, were nevertheless sometimes very exactly noted."

2. *Causation and circumstances under which the condition arises.*—The causes which induce the appearance and development of the "typhoid state" may generally be arranged under three main heads. In the first place, in both medical and surgical cases a most important and primary cause lies in the toxic and noxious influence that a high internal temperature has upon the tissue elements of the central nervous system and more especially upon those parts of the medulla in which are located the "respiratory" and "cardiac" centres, as well as the so-called "thermo-genetic" "centre." Secondly, another important etiological factor is the direct and cogent effect that this same high temperature both of blood and tissues has upon the parenchyma of the glandular organs, the liver, kidneys, and spleen, lessening elimination and blood elaboration, and acting injuriously upon the muscular fibre both of the heart and voluntary muscles. The third head in the causation of the condition in question lies in certain ill-understood chemical changes in the composition of the blood, and the effect that that chemically-altered blood has upon the bloodvessels and tissues generally of the body. This latter problem is a difficult one to solve, a "quæstio vexata," owing to the fact that our knowledge of the physiological chemistry of the blood (cf. writings of Halliburton, Hunter, Wooldridge, Crookshank, &c.), and of the action of toxic albumoses (Martin), ptomaines, and leucomaines, coupled with putrefaction products in the blood is more or less in a preliminary and transitional stage, and consequently limited, dimly lighted, and admittedly imperfect. Thus, to summarise this last factor, we have—(1) the absorption of the effete products of chemical combustion in the body; (2) the toxic effects of pathogenic, "infective," micro-organisms in the blood; and (3) the consequent alteration in the forces of the circulation, and variations in blood-pressure and nerve-stimulus.

The diseases in which the "typhoid state" most frequently occurs are for the most part as follows:—(1) typhus fever (Rouillion), and the "typhus traumatique" of Ollivier; (2) yellow fever, "bilious typhoid" (Fagge); (3) enteric fever (the term "typhoid fever" should be discontinued); (4) certain "pernicious," malarial fevers; (5) the "malignant" type of scarlet fever; (6) variola (Hilton Fagge), especially in the third week; (7) in the first stage of the plague, "after the appearance of intense pyrexia, and subsequent violent delirium";[5] (8) in cholera-typhoid, and in cholerine (Hilton Fagge); (9) in diphtheria, where the characters of an "infective" fever with febrile albuminuria and other "typhoid" symptoms are evident; (10) in "adynamic" remittent fever, and in the so-called "typho-malarial fever" of the United States; (11) in "malignant" and "intestinal" anthrax—in this condition, however, the temperature is not always high; (12) in "infectious pneumonia" of an epidemic nature, and "croupous" or "fibrinous" in type (Whitelegge)—this occurs both in fatal and in non-fatal cases which are severe and protracted; (13) in chronic starvation and general wasting (Whitelegge); (14) in phlebitis (Hodgson, Breschet, Blaudin), and in "la phlébite utérine" (phlegmasia dolens); and (15) in experimental injection of septic substances into the veins (Gaspard, Laurent, and Dupuis).

3. *Clinical phenomena, symptoms, and general course of the "typhoid state."*—Passing from a study of the etiology of this condition, to view the symptoms noted in cases under observation, the fact must be borne in mind that there are several phases of this "state" distinctly different in their nature but that in all cases there is an apparent similarity in the grouping sequence and arrangement of the symptoms. It will be convenient to classify those signs under the systems to which they naturally refer—as, for instance: (1) those symptoms directly referable to the nervous system, these being the most important and, as a rule, the most prominent; (2) those both primarily and indirectly referable to the circulatory system; and (3) those referable to the respiratory, digestive, and excretory systems. The phenomena referable to the nervous system constitute the major and more serious aspect of this condition, and in noticing them somewhat in detail it must be remembered that they are essentially characteristic evidences of a "diseased" and profoundly "depressed" condition of the higher nervous centres. Perhaps the most striking feature is the absolute depression of the nervous force and vital energy (adynamia and the diminution of the physiological activity and cell function of the brain). The patient is seen lying on his back, prostrate, listless, and quite indifferent to his surroundings. There is a low, somnolent, muttering delirium, gradually shading into a dull, comatose stupor, of heavy and "dusky" aspect, little or no real sleep (coma-vigil), associated at times with derangement of the senses, and hallucinations of sight and hearing. The power of the mental faculties is impaired—a dull and clouded intellect, a mind wandering strangely. The delirium may at one time be acute, violent, and noisy, an exacerbation from

[1] Thèses de la Faculté de Médecine de Paris; tome xiii. Paris, 1847.
[2] G. C. Monell: New York Journal of Medicine, 1846.
[3] Union Médicale; Paris, 1874.
[4] Edition of 1886, p. 30.
[5] Hilton Fagge; and vide Cantlie, Brit. Med. Jour., August, 1894

the more frequent low, muttering, and lethargic type. Sometimes muscular (fibrillar) tremor occurs, occasionally subsultus tendinum, carphology, and general convulsions. The urine and fæces are passed involuntarily, though in some cases retention and suppression of urine have been well marked symptoms. The fæcal evacuations are usually semi-solid, of a black colour and grumous appearance, and have a highly offensive odour. The urine passed in small quantities often contains albumen, frequently lithates in excess, and a diminution in the chlorides. The chief points observable with reference to the circulation are, that the pulse is quick, soft, small, irregular, and easily compressed, occasionally dicrotous, indicating a marked degree of diminished intra-arterial tension. The heart's impulse is weakened, sometimes scarcely perceptible, and there is almost a complete absence of the first sound at the apex. No distinctive cardiac bruit is audible. Turning to the digestive system the tongue is found to be dry, of a dark-brown or almost black colour, incrustated with thick, dark, russet-brown fur, tremulous, with an abundance of sordes on the lips and teeth. Hiccough is also present, at times frequently distressing, the breath having a peculiar heavy, offensive odour. The skin is in some cases dry and hot, with a surface temperature of 102° to 104° F.; in others it is bathed with a cold, clammy sweat, the temperature then being subnormal. There is also impairment of the general tactile sensibility of the skin together with taches bleuâtres, and extreme muscular weakness. It would appear that there are at least two distinct types of the "typhoid state," the one characterised by a marked elevation of temperature—pyrexia in a high degree; the other in which a subnormal temperature obtains, an apyrexial type. Thus in the "state" we must admit three main factors for consideration: (1) the existence of pyrexia, whether of a "sthenic" or "asthenic" type, more frequently the latter; (2) the essentially important part played by the nervous system in tending to induce such a "condition"; and (3) in some cases (surgical) the possibility of auto-inoculation and septic infection,[6] together with the absorption of the waste products of decomposition. In the more dependent parts of the body ecchymoses appear—especially over parts usually exposed to pressure; there is a general lividity of the limbs, and petechiæ are scattered here and there over their surfaces. The respiration is, as a rule, hurried and shallow, sometimes becoming stertorous. The physical signs of hypostatic congestion of both pulmonary bases are well marked in many cases. It would be highly advantageous if one could have the opportunity of making a detailed post-mortem examination, with a microscopic examination of the tissues, as well as of the blood and other fluids both during life and after death.

4. *Prognosis and treatment.*—In determining the prognosis of the "typhoid condition" difficulty and responsibility beset the practitioner, and, as in other morbid conditions, an expression of opinion must be guarded and based on a sound and broad consideration and estimate of the chief symptoms. The most important prognostic indications seem to lie in: (1) the effect produced upon the higher nerve centres; (2) the condition of the heart and bloodvessels; (3) the condition of the kidneys and the result of a careful urinary analysis with special reference to the presence or absence of albumen or sugar; and (4) the condition of the lungs. In the treatment of the "typhoid state" the *cause* of that condition must be the guiding principle, and in every instance the only correct and rational method of treatment will be based on a thorough knowledge of that cause. In the light of "general principles of treatment" attention must specially be directed to the nervous phenomena and the condition of the heart and circulation generally, not omitting such good and careful nursing as will husband the patient's strength as much as possible and tide him over a critical period. The administration of such drugs as the perchloride of iron in combination with the hydrochlorate of quinine and liquor strychniæ every four hours is clearly indicated and is most likely to be attended with an improvement in the patient's condition; benefit is also derived from hypodermic injections of ether, strychnia ($\frac{1}{30}$ gr.), morphia ($\frac{1}{6}$ gr.), and nitroglycerine ($\frac{1}{100}$ gr.), when the "exhaustion" is very pronounced. In order to maintain the force of the cardiac systole, and the tone of the cardiac muscle, such tonics as digitalis, convallaria, strophanthus, spartein, and cactus grandiflorus are of the utmost service; the last-named drug I have found very useful in five- to ten-minim doses of the liquid extract combined with quinine and opium. The free but judiciously guarded use of alcohol in the form of brandy, brandy and egg-and-milk, and brandy and meat-juice, is of the utmost importance. The alcohol must be administered with other liquid food at regular intervals, and the quantity determined by the condition of the pulse and temperature. Rectal feeding must also be resorted to in order to supplement the ordinary method and to assist in supporting the patient. Local applications, such as tepid sponging with vinegar and water, the wet pack to the head and limbs, also mustard-leaves or poultices to the præcordia, and hot bottles to the sides and feet, are of considerable value. Attention to details of treatment, careful investigation into the condition of the excretory and other organs, and minutiæ of thoughtful and intelligent nursing will all materially assist in bringing about a satisfactory and successful issue.

[6] Cf. Lectures on Traumatic Infection, C. B. Lockwood, THE LANCET, March 2nd, 9th, and 23rd, 1895.

II.—SURGICAL.

In the domain of surgery, the examples of the "typhoid condition" can be for the most part roughly divided into those occurring in (1) any acute inflammatory condition associated with marked pyrexia and profound disturbance of the nervous system, and (2) those occurring in long-standing and in some of the more chronic forms of constitutional disease associated with the sudden onset of acute and consequently grave symptoms, the result in the main of either absorption of the organised chemical products of decomposition (septicæmia), or of chronic suppuration, or of a series of symptoms directly referable to the nervous system "broken down" and exhausted by prolonged suffering. I will specify somewhat in detail. Under the secondary constitutional effects of injuries or of operations and of some diseases there occurs that most important clinical feature known as "surgical" or "traumatic" fever, which implies a general disturbance of vital processes and functions as well as of the thermo-genetic equilibrium. In those cases in which this fever assumes what is termed an "asthenic" or "adynamic" type, there is afforded a typically developed example of the "typhoid state," a condition in which the terms "typhoid" and "asthenic" are almost synonymous. This form of "asthenic" pyrexia is seen in patients whose general health, constitution, and vital powers have been severely undermined by excesses of various kinds, more especially by alcoholism, by privations, and by any or all of those depressing causes in any disease acting consecutively. In this condition the temperature is not *per se* a cardinal feature, as it may be high or comparatively low, the chief points being the complete exhaustion of the nervous centres, a feeble, failing, irregular pulse, shallow respiration, extreme muscular weakness, and a dry, brown, tremulous tongue. Another instructive instance of "typhoid" symptoms setting in occurs in one or other of the various forms of septicæmia, whether this be the outcome of septic infection, septic "intoxication," or embolic pyæmia (which is septicæmia *plus* metastases). In this septicæmic condition all the leading characteristics of the "state" are found—low, muttering delirium, flickering pulse, stupor, &c. It is a well-known fact that in all "infective" or "septic" inflammatory processes the symptoms frequently and almost imperceptibly merge into an "asthenic" type, this general asthenia of motor, sensory, and psychical power thus producing a "typhoid" condition. In another group of cases, such as those of chronic catarrh of the bladder (chronic cystitis), with thick, copious, muco-purulent secretion, the patient sometimes sinks, without strength and "worn out," the closing scene being characterised by a "typhoid" condition. In such an example, in all probability, two distinct factors are at work in bringing about a fatal issue—viz., (1) the constant exhaustive drain effected by long-continued reflex irritation on the nervous system; and (2) the chemical changes occurring in the urine, in the blood, and in the exudative discharge from the vesical mucous membrane, and in the combined effect on the excretory organs, and indirectly on the general nutrition of the body. This condition is also observed in the third stage, that of pyrexia with exhaustion, in dissection or in post-mortem wounds (*piqûres anatomiques*), where the subtle and rapid absorption of the necrotic virus, and its still more alarmingly rapid multiplication and chemically toxic power within the system, have the baneful effect of establishing an intense depression and disturbance of the functions and influence of the nerve centres, ending in a destruction of

their vital force and power. Cases of diffuse cellulitis can be recalled—the "diffuse phlegmon" of Dupuytren—where, in a previously debilitated system, severe constitutional disturbance supervenes, and a train of "typhoid" symptoms sets in. This is also the case in examples of acute spreading gangrene, a condition in some aspects allied to chronic septicæmia, in which the absorption of the chemical products of disintegration and putrefaction has from first to last a toxic and seriously injurious effect. The condition has also been noticed in wide-spread burns of the fourth and fifth degrees. Another instance of the "typhoid" phenomena occurs during an attack of "delirium tremens," the result of hard drinking, when marked signs of exhaustion of the nervous system set in with failure of functional power, and again in those cases of "nervous traumatic delirium" which not infrequently arise in patients with an "irritable" and somewhat unstable nervous system, or in those who have suffered from prolonged mental anxiety and the enervating effect of worry and over-strain. If the patient be the subject of an almost impermeable organic stricture, and if unrelieved retention exist, and if, in consequence of the rupture of the dilated portion of the urethra which is immediately behind the seat of such a stricture, extravasation of urine takes place, the united effects of such a condition, both local and general, give rise, on the one hand, to the most deleterious consequences to the tissues themselves, and, on the other, severe constitutional disturbance; "typhoid" symptoms rapidly supervene, in which muttering, quasi-insensible delirium, a small and rapid pulse, and dry, brown, and cracked tongue, form the most prominent features. Clinically allied to the foregoing condition, and in natural sequence, is the disease described under the term "acute, diffuse, interstitial, suppurative nephritis," associated with multiple scattered abscesses ("surgical kidney") in which the patient sooner or later sinks into a heavy, drowsy state, "typhoid"-like in character, and succumbs within a comparatively short time from poisoning by absorption of septic matter and waste products, a condition of uræmia, and closely resembling chronic pyæmia or septicæmia. Lastly, one observes the development of "typhoid" symptoms in cases of acute traumatic meningitis and encephalitis, complications of some injury inflicted on the skull and the structures contained within it. In these cases, with an open wound of the head, infection readily and often insidiously takes place unless more than ordinary care is exercised to prevent the establishment of a condition of sepsis. If, however, septic meningitis has taken place there is a speedy exacerbation of the general symptoms, especially the temperature, which mounts up to 104°F., concurrently with restlessness and delirium, which, if symptoms of compression coexist, passes into that drowsy, stupefied type, the breathing becoming stertorous, the pulse feeble and failing, and the patient succumbs in an exhausted condition from the dual effect of failure of the nervous system and compression. In the intra-meningeal form of intra-cranial suppuration which is occasionally associated with pyæmia "typhoid" phenomena appear towards the close of the case. In the days before attention was definitely directed to hygienic conditions in relation to surgical procedures cases not infrequently occurred where anæmic, cachectic, and debilitated patients, crowded together in a small, ill-ventilated ward, suffered from languor, headache, "continued fever," and similar symptoms indiscriminately passing into an "adynamic" or "typhoid" condition,[7] which was in part due to the poisonous effects of an excess of carbon dioxide, gases of decomposition, and organic impurities in the air of the ward, and in part to the absence of sufficient air space per bed. Another important consideration in connexion with the development of the "typhoid state" during the course of any disease lies in the fact that in overcrowding and the continued inhalation of a vitiated atmosphere there is a marked prevalence of diseases of the respiratory tract, such as phthisis, pneumonia, and bronchitis, all of which, under the above-mentioned conditions, have a tendency to assume an "adynamic" type closely allied to the "typhoid state." Of the twenty-three survivors of the Black Hole of Calcutta many suffered from a condition which is designated under the term "putrid fever," probably allied to typhus fever,[8] in which "typhoid" symptoms were well marked. An example of the supervention of such symptoms is also met with in animals in severe cases of "foot-and-mouth" disease, in which there is much fever, prostration, and thirst, these symptoms being the more pronounced in sucking animals.[9] Writing on the "typhoid condition," Tweedie states that "it is announced by the decline of the previous more acute symptoms: by the pulse becoming more rapid and soft; the tongue dry and brown, tremulous, and protruded with difficulty; by the incrustration of the teeth with sordes; by the increasing intellectual disorder, indicated by the more constant low, muttering delirium, and the greater insensibility and deafness; and by the condition of the muscular system evinced by muscular tremor and subsultus tendinum, and in some cases irregularity or intermission of the pulse; by the patient lying sunk on his back or sliding to the foot of the bed, the muscles being unable to support the body even in the horizontal posture." Milner Fothergill reviewed this subject under the following considerations:—(1) the association of high temperature with its effect on the entire muscular system—this point has also been emphasised by C. B. Radcliffe, Wunderlich, and Bennett Dowler of New Orleans; (2) the general wasting of the muscles in fever; (3) the marked sense of prostration (*debilitas febrilis*); (4) the excess of urea excreted in the urine, there being a definite relation between temperature and amount of urea (in 'typhoid fever' about 1065 grains of urea are excreted in twenty-four hours, the normal being 400 grains); and (5) the pathological condition of the muscular structures before and after death. He also considers that this condition is due to an increased metamorphosis of blood and tissues with subsequent rapid wasting of the latter ("histolysis"), and that it is a common and necessary result of fever. He insists on the importance of "muscular prostration"—the patient being often found lying on his back in the middle of the bed, having gradually slipped down—as a characteristic clinical sign, and notes that "muscular weariness" is one of the earliest symptoms. The remark of Da Costa that "no blunder is more common than to misconstrue into typhoid fever a typhoid condition of the system" is not without its weight and value in reference to diagnosis.

III.—CONCLUSION.

In concluding these incomplete remarks on the "typhoid state" I regret that I am unable at the present to furnish further details as to its pathology, and as to the temperature or the condition of the circulation as shown by sphygmographic tracings. I have not yet been able to find an adequate reply to the query, Does the "typhoid" condition occur more frequently among persons of a highly nervous temperament or of a hereditarily unstable nervous system? I have not been able to discover any examples of this condition in cases of malignant disease, whether sarcoma or carcinoma.

In asking the indulgence of the readers of THE LANCET I am reminded of Boileau's lines:—

"Hâtez-vous lentement; et, sans perdre courage,
Vingt fois sur le métier remettez votre ouvrage:
Polissez-le sans cesse et le repolissez;
Ajoutez quelquefois, et souvent effacez."

Tunbridge Wells.

ON THE

TREATMENT OF ACUTE RHEUMATIC ENDOCARDITIS.

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IN the year 1881 I commenced a definite inquiry, which I have pursued steadily for fourteen years so far as cases suited for the purpose came under my observation, on the course and treatment of the acute endocarditis of rheumatism, and I now propose briefly to state its results.

Gravity of cardiac rheumatism.—Numerous cases of acute rheumatism necessarily come under the care of every hospital physician—I have treated about 320 cases of acute and subacute rheumatism during the fourteen years in question. While speedy cure of the rheumatism itself usually follows, a proportion of these cases—perhaps 1 in 3 or 4—suffer

[7] Whitelegge: p. 21 &c.; Plates of Air Samples, Parkes' Hygiene, sixth edition, p. 112; and Dupuytren and Pirry, Traité de Chirurgie, Paris.

[8] Cf. "Om status putridus och nervosus." Naumann. Stockholm, 1834

[9] Wilson, "Hygiene," p. 43.

cardiac complication, and the physician has the pain of seeing the patient leave the hospital bearing the seeds of a malady which is certain to cause suffering and shorten life. Perhaps the physician follows the whole career of such a case extending over some years. A vigorous man comes to him suffering from acute rheumatism, but with a sound heart; endocarditis affecting the mitral valve occurs and persists; the rheumatism subsides, the patient returns home thinking himself well, but on exertion suffers from an unaccustomed shortness of breath; bronchitis, increased difficulty of breathing, inability to follow his occupation—if it be a laborious one—and dropsy follow; dilatation of the right ventricle, and tricuspid disease may set in and death closes the scene. Many of us have seen cases like this, and have felt their extreme sadness.

Objects of the inquiry.—Feeling the importance of doing what little was in my power to further any inquiry which might mitigate the frequency of heart disease, I set myself during the last fourteen years to try to obtain information on two points—viz., (1) as to how the occurrence of endocarditis may be prevented during acute rheumatism; and (2) whether or not, when it does occur, any treatment during the incipient stage would favour recovery. When the disease is fully established of course there can be little hope of benefit. I had first to acquaint myself with the experience of former writers in our own country, in Europe, and in America. That of the earlier authors I found of less value on account of their imperfect diagnosis; and also their treatment, on account of its severity, did not commend itself to me. The opinion of more modern writers was highly conflicting. Some considered all measures having in view either prevention or cure practically useless. The weighty names of Niemeyer and of Osler were among these. It was encouraging to find Sibson and others pointing out the value of absolute and protracted rest, both as a prophylactic and as an aid in the cure of incipient endocarditis. Various writers described the occasional spontaneous disappearance of bruits in acute rheumatism. This, I think, there can be no doubt of: I have myself seen it happen twice. The general opinion was that a bruit when once established remains in the large majority of cases, and is followed by permanent heart disease. Many forms of treatment were suggested. The older writers advise bleeding and mercurial salivation, the local employment of dry and wet cupping, leeches, blisters, mustard plasters, iodine, ice-bags, poultices, the actual cautery, the internal administration of potassium or sodium iodide, digitalis, aconite, mercury, &c.

Bad results of expectant treatment.—Meantime I proceeded to observe a number of cases, merely treating the rheumatism by salicylates and keeping the patient in bed under generally favourable conditions, but doing nothing of a special kind for the endocarditis. In other cases I experimented with some of the milder among the agents I have referred to. Up to the end of December, 1885, the results obtained from merely treating the rheumatism and doing nothing for the endocarditis, also from partial blistering or the use of leeches or poultices, were not favourable; of fourteen cases one lost the bruit spontaneously, although no treatment was employed; a second lost it after repeated blistering and the use of potassium iodide; and the remaining twelve went out with a bruit which I fear has been permanent in each case, and has probably terminated in death in many instances before now. The experience of these four years disposed me to adopt some definite method. Adopting no treatment had led to unfavourable results alike during this period and during previous years.

Method of treatment selected.—Guided by the physiological facts to be stated later in this paper, it seemed to me that the use of a succession of small blisters along the course of the fourth, fifth, and sixth intercostal nerves, together with the internal use of potassium or sodium iodide not only gave as much promise as any other method, but tended but little to disturb or to weaken the patient. I had, moreover, had one successful case already, Case 12 (see Abstract), in which an aortic bruit disappeared; so I proceeded to treat almost all subsequent cases in this way, enjoining also a prolonged rest in bed.

Before detailing the results I ought to say something about (1) the general treatment of these cases of acute rheumatism; (2) about the efforts made to prevent cardiac disease; and (3) about the evidence I relied upon as indicating the presence of genuine endocarditis in the cases on the list which I subjoin.

1. *General treatment of rheumatic cases.*—The patients are kept in bed; I prohibit as far as possible all exertion or exposure. No getting out of bed is allowed, and to prevent chills a long flannel nightshirt is worn, a stock of these garments being kept on purpose for rheumatic cases in my wards. Thus the profuse perspiration incident to the disease is not likely to be checked. A light milk diet is given. Gentle cholagogues are administered and salicylates are given in such measure as the disease seems to demand. If the pain fails to yield in any joint I immediately apply small blisters followed by poultices, a method which rarely fails to give great relief, as I can testify from the experience of hundreds of patients. Hyperpyrexia or any special symptom receives appropriate treatment. The patient is kept in bed and on a light diet for a considerable time after the disappearance of pain.

2. *Efforts to prevent cardiac complication.*—There seems to be strong ground for believing that perfect quiet and rest and avoidance of chills during acute rheumatism lessens the liability to cardiac complication. Cold to the surface undoubtedly increases the inflammation of synovial membranes; rheumatic inflammation of the endocardium is similar in kind and is likely to be affected similarly. My own experience certainly is in favour of this opinion. In what proportion of cases is the heart affected? There is much divergence of opinion as to the proportion of cases in which the heart is attacked. Codet, the French writer, puts it down at 81 per cent., Picot at 78 per cent., Mansir and Shadwell's list from Guy's Hospital Reports gives over 50 per cent. The lowest average I read of is 25 per cent. During the period my list of cases covers I have had about 320 cases of febrile rheumatism, but in many of them the fever was slight and temporary. My proportion is under 20 per cent. Probably the great discrepancy in percentages is due to different conceptions of the meaning of the term "acute rheumatism." If it be restricted to the highly febrile type the high estimates (60, 70, 80 per cent.) I have quoted will probably be correct. Though, according to my own experience, endocarditis is not confined to pyrexial cases, it is certainly more frequent in them, and I think I may consider my proportion of cases of rheumatism with cardiac complication to have been comparatively small.

3. *Were my cases examples of genuine endocarditis?*—I should like to say that of course cardiac murmurs are of very different values. The bruit of anæmia, for instance, heard chiefly about the pulmonary area, and the bruit of muscular weakness which is sometimes met with in fevers and other conditions of exhaustion, are not to be mistaken for signs of endocarditis. The former occurs sometimes in acute rheumatism, but only in the later stages. The murmur at the pulmonary cartilage in Case 41 (see Abstract) was probably of this order. Also the bruit due to muscular impairment, if it occurs at all in rheumatism, happens at a late period, when the patient is enfeebled by a lengthy illness. I have always been on my guard against mistaking either of these forms of bruit for that occasioned by endocarditis. The great majority of the cases in the list are those of commencing mitral disease. The aortic valves were affected in five cases, and in seven pericarditis occurred. I make it a rule to examine the heart of every rheumatic patient daily, so as to be on the lookout for any commencing mischief.

Period at which the heart is affected.—In a few cases endocarditis seems to occur coincidently with the first rise of temperature and the joint affection. More often it happens during the first ten days; sometimes it is later when the temperature has fallen and pain gone and the patient thinks himself getting well. Sometimes it occurs during a relapse of the rheumatism, as in Case 18. The patient had been going on well for a week with normal temperature, when suddenly, on March 9th, the temperature rose and endocarditis became apparent. If a bruit has disappeared it is apt to recur during a relapse of the rheumatism, as in Cases 44 and 48. As to symptoms, there are sometimes præcordial discomfort and further rise of temperature, but generally, in my opinion, no special symptom has attracted the patient's attention when an endocarditis has first become perceptible to the physician. In pericarditis symptoms are more common. The following has been my experience of the first signs of endocarditis. Suppose a case of mitral regurgitation. The patient has been admitted with a heart the sounds of which were normal excepting as regards rapidity of beat. One notices a change in the character of the first sound—what the French writers call "assourdissement"—a loss of clearness and sharpness in the tone. The note is dull

ABSTRACT OF FIFTY-TWO CASES OF ACUTE RHEUMATIC ENDO- AND PERI-CARDITIS, SHOWING TREATMENT AND RESULT.

(When the date of first appearance of bruit is not given it was present on admission, but believed to be recent.)

No.	Age.	Dates of Admission.	Dates of Discharge.	Physical signs of cardiac disease.	Special treatment of cardiac complications.	Cardiac physical signs on discharge.	Remarks.
1	21	Dec. 21st, 1881	Jan. 11th	Mitral bruit	None	Mitral bruit	—
2	19	Dec. 29th, ,,	Jan. 7th	,,	,,	,,	—
3	25	March 9th, 1882	May 12th	Mitral bruit on March 21st	,,	,,	—
4	33	May 22nd, ,,	May 31st	Mitral bruit	,,	,,	—
5	28	March 19th, 1883	May 1st	Aortic systolic bruit	,,	Aortic bruit	—
6	23	Dec. 27th, ,,	Jan. 17th	Aortic, diastolic, mitral, and pericarditis	Poultices	Mitral bruit	—
7	15	Dec. 29th, ,,	Jan. 11th	Mitral bruit	None	,,	—
8	23	April 17th, 1884	May 22nd	Mitral bruit on April 19th	One blister	,,	—
9	26	July 8th, ,,	July 29th	Mitral bruit	None	,,	—
10	26	Nov. 17th, ,,	Jan. 30th	Mitral bruit on Dec. 9th	Blisters, pot. iod.	,,	Rheumatism long continued.
11	21	March 9th, 1885	March 26th	Mitral bruit	One blister	,,	—
12	12	June 15th, ,,	July 13th	Aortic systolic bruit	Blisters, pot. iod.	No bruit	—
13	17	Sept. 18th, ,,	Nov. 9th	Mitral bruit, pericarditis	One blister, leeches	Mitral bruit	Adherent pericardium.
14	21	Dec. 7th, ,,	Dec. 21st	Mitral bruit	None	No bruit	—
15	16	Jan. 5th, 1886	March 14th	Pericarditis	Blisters, pot. iod.	Normal	—
16	18	Jan. 6th, ,,	Feb. 23rd	Mitral bruit on Jan. 26th	,,	No bruit	—
17	19	Jan. 22nd, ,,	Feb. 19th	,, on Jan. 25th	,,	,,	—
18	21	Feb. 23rd, ,,	April 14th	,, on March 9th	,,	,,	Relapse on March 9th.
19	16	March 3rd, ,,	March 29th	,,	,,	,,	—
20	49	March 13th, ,,	April 30th	,,	,,	,,	—
21	19	March 27th, ,,	May 10th	,,	,,	,,	—
22	18	May 10th, 1887	May 23rd	,, on May 18th	None	Mitral bruit	—
23	34	April 23rd, 1888	May 24th	Aortic systolic bruit on April 30th	Blisters, iodides	No bruit	—
24	19	May 10th, ,,	June 14th	Mitral bruit	,,	,,	—
25	17	Jan. 10th, 1889	May 6th	,,	,,	Mitral bruit	—
26	21	May 9th, ,,	May 22nd	,,	,,	Faint mitral bruit	Bruit lessened greatly under treatment.
27	66	June 7th, ,,	July 12th	,,	,,	No bruit	—
28	28	Feb. 6th, 1890	March 22nd	Mitral bruit on Feb. 11th	,,	?	Result not stated.
29	16	June 4th, ,,	July 16th	,, on June 27th	,,	No bruit	—
30	21	June 24th, ,,	August 15th	,, and pericarditis	,,	,,	Pneumonia.
31	19	Dec. 27th, ,,	Feb. 26th	,, on Jan. 1st; aortic on Jan. 21st	,,	Bruit on Feb. 12th	No later report.
32	29	Feb. 7th, 1891	March 14th	Mitral bruit on Feb. 10th	,,	No bruit	Much delirium.
33	14	May 13th, ,,	June 11th	Mitral bruit	,,	,,	—
34	18	June 13th, ,,	July 13th	Mitral bruit on June 17th	,,	,,	—
35	18	Sept. 23rd, ,,	Nov. 5th	,, on Oct. 7th	,,	?	Result not stated.
36	13	Nov. 27th, ,,	Dec. 31st	,, (loud)	,,	Faint bruit	—
37	18	Dec. 20th, ,,	,,	,,	,,	No bruit	—
38	28	Oct. 16th, 1892	Nov. 28th	,, pericarditis	,,	,,	—
39	26	Nov. 18th, ,,	Dec. 7th	,,	,,	,,	—
40	28	Jan. 18th, 1893	Feb. 10th	,, on Jan. 22nd	,,	,,	—
41	21	,, 25th, ,,	,, 19th	,, on Jan. 26th	,,	No mitral bruit	But faint bruit at third left cartilage.
42	35	March 11th, ,,	April 20th	,, on Jan. 14th pericarditis	,,	No bruit	—
43	30	May 17th, ,,	June 23rd	,, on May 23rd	,,	,,	—
44	19	July 19th, ,,	Sept. 17th	,, on July 21st	,,	Mitral bruit	Bruit disappeared under treatment, but returned during relapse of rheumatism, Aug. 21st, and persisted.
45	42	Jan. 11th, 1894	March 3rd	,,	,,	No bruit	—
46	19	May 2nd, ,,	May 30th	,,	,,	,,	—
47	13	June 14th, ,,	Aug. 9th	,, on June 16th	,,	?	Result not stated.
48	17	July 4th, ,,	Aug. 13th	,, on July 16th	,,	1st sound slightly prolonged	Bruit disappeared under treatment, but returned during relapse on July 27th, and again disappeared.
49	15	,, ,,	July 28th	,, and pericarditis	,,	No bruit	—
50	24	July 25th, ,,	Oct. 3rd	,,	,,	Mitral bruit	—
51	22	Dec. 8th, ,,	Jan. 18th	,,	,,	No bruit	—
52	18	March 4th, 1895	May 15th	,, on March 5th	,,	,,	—

Summary.

Of 39 cases treated by repeated blistering over heart and administration of iodides (average stay in hospital, 41 days), 29 left hospital without a bruit; 7 left with a bruit; and 3 were uncertain—they probably had a bruit. Of 13 cases not treated, or treated otherwise (average stay in hospital, 25 days), 1 left hospital without a bruit, and 12 with a bruit.

and woolly, so to speak; it becomes prolonged, and this dull, prolonged sound by degrees changes into an undoubted bruit. Many and many a time have I noted these changes, and foretold them from the time when the first dulness of tone was observed. The bruit is best heard about the apex, but is audible in the axilla; it is usually systolic, occasionally presystolic, and sometimes it is both. Frequently it is accompanied by accentuation of the second sound in the pulmonary area.

Details of treatment of incipient endocarditis.—As soon as the bruit is perceptible, or even prior to that, during the preliminary stage of "woolliness" I at once give potassium or sodium iodide in ten-grain doses thrice daily in addition to the salicylates, and apply near the apex a blister about the size of half-a-crown; as soon as the irritation of this blister is subsiding I apply a second close to it, then a third and so on, keeping the patient meantime as quiet as possible, strictly forbidding exertion, exposure, or too much nitrogenous food. I have scarcely ever known the patient to complain of the blisters, which practically occasion little or no discomfort. The heart should be examined daily. Frequently in a week or in ten days' time I have had the satisfaction of noting a gradual subsidence of the bruit; day by day it becomes less clear and distinct, until at length it is found to be only occasional, and at last to be entirely absent. Sometimes several weeks elapse before this desirable change is accomplished. I think the prolonged rest in bed has an important share in this good result. It will be noted that the thirty-nine cases which I treated on the above principle were, on the average, forty days in hospital, and were confined to bed for thirty-five or thirty-six days. When the bruit has gone, I have, when possible, kept the patient under observation for awhile. Sometimes this is not practicable, but I have often for many weeks noted the condition of the heart and found it perfectly normal. In some instances I have done this for two or more years.

Excellent results obtained.—It will be observed from my list that in the thirteen cases which were either not treated at all or imperfectly treated by blistering, poulticing, leeching, &c., with an average residence in hospital of twenty-eight days, the result was that twelve left hospital with a bruit which I fear they retained throughout life. One case, however, lost his bruit spontaneously. But of the 39 cases treated by prolonged rest, repeated blistering, and the administration of iodides, 29 left hospital with normal heart sounds, in 3 the result was doubtful, and 7 left with a bruit. I must confess that this series of twenty-nine patients in whom distinctly marked bruits had been heard, but who left the hospital with normal heart sounds, constituted a better result than I had ever ventured to hope for. It is, in fact, so good a result that I do not expect that the readers of this paper will altogether accept it. Many will believe that mistake or error has crept in somehow. To the best of my knowledge and belief, what I have stated is accurate. The cases were not examined and recorded by myself alone, but by registrars, house physicians, and clinical clerks.

Theory of the treatment.—I claim for this method that it is essentially a reasonable one on the following grounds. So-called "counter-irritation" has fallen much out of vogue in the profession, partly because the old theories on which it was formerly supported are felt to be untenable. We cannot believe that a poultice or blister draws blood from, or acts directly in any manner upon, an organ in the thorax or abdomen, but it by no means follows that the practice is bad because the former theory was unsound. Such treatment has been partially abandoned also because our predecessors carried it out to excess so as to cause pain and to enfeeble the patient. If we apply a small blister or a poultice to the skin of the thorax or abdomen I believe its effect on the organs situated at some distance beneath is solely an effect transmitted through the nervous system and reflected from the nerve centres in the spinal cord and sympathetic system. The nervous system may be summarised as a series of segments arranged in a line corresponding to the various somites of the body; each nerve segment governs to some extent the nutrition of its own somite, alike as regards epi-, meso-, and hypo-blastic structures. If a cutaneous nerve is stimulated the nerve cells in the spinal and sympathetic centres are influenced, and the impression is reflected to the visceral branches. It may be said that this is mere theory, but it is a theory which satisfactorily explains many familiar facts—e.g., it explains the fact that a slight chilling of the skin of the thorax may cause pneumonia or bronchitis, and that a splash of cold water will excite respiration in the infant or set a-going the action of the heart in a faint. I may add that I think I proved this theory in a paper read before the Physiological Society at Oxford a few years ago by demonstrating that stimulation of the surface skin altered the diameter of the arterioles in the lung and caused variation in the electrical condition (as manifested by the galvanometer) of thoracic and abdominal organs. It is quite clear that stimulation of the skin of the abdomen by heat, by chemical irritation, by faradaism, or by mechanical irritation produces instantly a variation in the electrical potential. This, however, is so extensive and complex a subject and occupied so many months of hard work in the laboratory that I cannot hope to make it clear in the space of a few lines. Turning to more familiar evidence, few persons, I think, will deny the soothing effect of a poultice in a case of bronchitis, nor, I think, can any explain that effect satisfactorily in any other manner than that I have just stated. When that form of impaired functional activity is occurring in the tissues of the heart which is called "rheumatic endocarditis," a stimulus is applied to the nerve centres, and the trophic nerves of the heart help nature to overcome the defective action. That is the theory on which this treatment by blistering is based. I believe that the assisted natural powers succeed where, if unstimulated, they would fail.

I should like to say here that after twenty-five years' experience of counter-irritation in many forms, carried out in view of the theory I have stated, I think it is one of our most valuable therapeutical expedients for the relief of pain, for lessening inflammatory action, and for the stimulation of restorative processes. A very limited irritation of cutaneous nerves will suffice; I never use large blisters—generally they are smaller than a florin; small vesications give great relief and cause practically no suffering and no loss of strength. As to the sodium or potassium iodide, it is given on account of its value in absorbing inflammatory products of low vitality. I am anxious to know what the experience of others has been in regard to the very grave disease in question, and to hear of alternative or superior plans of treatment. In conclusion, the one thing I am specially anxious about is that members of the profession who have the opportunity of observing cases of acute endocarditis should give this method a fair trial during the early stage of the malady. If they do, I think they will not be disappointed.

Liverpool.

INFECTIOUS SORE THROATS.[1]

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THE importance of obtaining early information of outbreaks of infectious disease led me some three years ago to issue a circular letter to all the school managers in my districts asking them to instruct their head master or mistress to give me the earliest possible intimation of the presence amongst the children attending school of any affection which appeared to be infectious, and I also drew attention to the fact that sore throat, especially if associated with headache or sickness, was one of the earliest symptoms of certain infectious diseases. The result of the above procedure has been that many epidemics in which the most constantly marked symptom was sore throat have been brought under my notice which could neither be referred to diphtheria nor to scarlet fever. The following are examples.

In February, 1893, I received a note from the schoolmaster of an isolated parish saying that he was afraid that diphtheria had broken out in the school. I found several children were then in school who had been absent during the previous week for three or four days. They had suffered from headache, more or less marked, a little feverishness, and sore throat. In a very few days they were sufficiently well to return to school. Examination of the tonsils simply showed that they were enlarged, pale, and somewhat flabby. I visited several of the absentees and found in most cases they had suffered from a little headache and chilliness. The tonsils were enlarged, not abnormally red, but the mucous membrane round the apertures of the follicles was distinctly infiltrated, slightly thickened, greyish, and opaque. Exactly the same

[1] Paper read at a meeting of the Home Counties Branch of the Medical Officers of Health Society, Feb. 7th, 1895.

condition had at this time led at least two practitioners in my district to notify such cases as diphtheria. Two patients in the particular outbreak referred to suffered more severely, both bleeding freely from the nose. One had a temperature of 104° F. for two days, probably due to tonsillitis, which was followed by suppuration. The disease was evidently infectious, two and three children in one house being attacked. A few adults also suffered, and both the severe cases mentioned were of adults. I concluded that this was a form of influenza, since a few typical cases of that disease were met with, and usually in houses in which others were suffering from sore-throat. In various other parishes about this time I met with similar cases, some of which, as just remarked, were diagnosed as diphtheria. Beyond the circular patches of infiltrated mucous membrane round the apertures of the crypts of the tonsils there was nothing to indicate diphtheria. At a later date I examined such a throat bacteriologically, but obtained no diphtheria bacilli. In May a similar epidemic occurred in another parish many miles distant, but a large proportion of the patients suffered from epistaxis, and there were no typical cases of influenza in the same houses. In none of the above cases was any rash observed. In October of the same year I was asked to visit another parish in which the school attendance was suffering from absence of children on account of sore throats. I found that most of the children affected had been out in the fields picking acorns in the damp grass. The children appeared at first to have taken cold, then the throat became very sore, and the submaxillary glands at one or both sides enlarged. The tonsils resembled those just described, but in one case the mucous membrane of the pharynx was affected, and I seriously suspected diphtheria for a time. Herpes on the lips was met with in several instances. This little outbreak, if we may so call it, seemed to me to be due to "catching cold," whatever that may mean, and that the prevalence was due not to any infective quality, but merely to the fact that a considerable number of children had been occupied out of school hours in gathering acorns during a wet season. Later in the same month a medical gentleman asked my opinion upon a number of cases which had occurred in his practice in a particular circumscribed area. Some he said were undoubtedly follicular tonsillitis, others so closely resembled diphtheria that he did not know whether he ought not to notify. The onset was accompanied with headache and shivering. The throat was congested, the tonsils enlarged, and the crypts patent and sometimes plugged with muco-pus. The glands at one or both sides of the neck were enlarged. There was very little prostration, and recovery took place in from two to seven days. There was undoubted evidence of infectiousness.

In December, 1893, an outbreak of what was said to be diphtheria occurred in a parish at the border of my Chelmsford district. Two or three cases were notified as diphtheria and one child died of croup, but the medical attendant did not feel justified in notifying it as diphtheritic. From the resemblance of the cases to those previously described as due to influenza I regarded these as the same, and I had no reason afterwards to alter my opinion. There were two schools in the parish, but the outbreak was limited to the children attending one of these. Towards the end of last year my attention was again especially directed to a series of similar outbreaks. On Dec. 12th I found in one parish that forty-six children (twenty-nine families) had been or were away from school on account of "sore throat." In a typical case the child complained of feeling cold, sat over the fire, and shivered. The face was flushed and had an expression of weariness; the throat was a little sore, and there was a little headache, and sometimes pain in the limbs and generally weakness. The submaxillary glands were enlarged in a few cases, but not markedly so. The tonsils and pharynx were slightly congested. There was no infiltration. The patients usually got well again in from three to seven days. I found one or two cases fairly typical of influenza, and one case in which the pains in the limbs had been so severe that the parents called in a medical man, thinking that the lad was suffering from rheumatic fever. In another large village about the same time many children were absent from school on account of some undefined illness. The parish was an extensive one, and for some time past sporadic cases of scarlet fever and of diphtheria had been reported. The cases notified as scarlet fever were undoubtedly correctly diagnosed, but there is a doubt about the diphtheria cases. Cultures were made in three out of four notified cases, but no Löffler's bacilli were found, and in a piece of membrane from one throat which the Local Government Board asked Dr. Klein to examine for me he failed to find these bacilli. I examined a number of throats and obtained a very varied assortment of organisms, but nothing to indicate diphtheria. The children were ailing for a few days only, and a fair proportion had enlarged glands under the jaw. The swelling was so marked that many cases were regarded as mumps, but the patients I saw had no affection of the parotid gland. No cases of scarlet fever followed in any of the infected families and I do not think the affection was of that nature.

I will not quote instances in which sore throats were prevalent just prior to outbreaks of scarlet fever or diphtheria, but I may ask, Is the generally received opinion—viz., that these are mild cases of one or other disease—correct? Thrice recently I have investigated the nature of outbreaks of sore throat, associated in a minority of cases with a very slight and evanescent rash, which I very much doubted were scarlatinal in character, but which at a late stage of the epidemic merged in a few instances into well-marked cases of scarlet fever. The property of progressive infectiousness and increase in virulency is apparently common to both scarlet fever and diphtheria, but the slight cases of the former are not so industriously searched for as are those of the latter. During an epidemic of mumps, also, numerous slight and anomalous cases occur which it would be impossible to diagnose were it not known that parotitis was prevalent. The last series of cases of sore throat which I have examined was associated with an outbreak of mumps. In several infected families, whilst some members had all the typical symptoms, others had had headache, nausea, or actual vomiting, pains in the limbs, and sore throat, but no enlargement of the parotids. A medical man who attended some of these cases told the patients that they were suffering from "internal mumps." I wish in the next place to ask whether my recent experience with regard to diphtheria corresponds with that of other medical officers of health. The mortality during the past year has only been about 5 per cent. amongst the cases notified in the Chelmsford rural sanitary district, having in previous years been about 20 per cent. My last epidemic, not yet over, has included about thirty cases, all of which have terminated favourably. In the first family affected four out of five children were attacked, and one case for a time threatened to prove fatal. No diphtheria bacilli could be found in the membrane. As the cases occurred bacteriological examinations have been made, and only in one instance were any organisms resembling Löffler's found. In the case referred to, that of a lad aged eighteen, there was a well-marked membrane, but he was never confined to bed; in fact, he lived with the family (six children) as though nothing was the matter, smoked all day long, got better in about ten days, had no sequelæ, and none of the other inmates of the house have been affected or infected. I am inclined to think the bacilli, from their mode of growth, are the pseudo-variety described by Klein. I have already referred to the fact that in another parish four cases of diphtheria have been notified, and that in the three examined no diphtheria bacilli were found. Besides these several other isolated cases have occurred. A typical case is one which I recently examined at the request of a local practitioner. The patient was this practitioner's assistant. I was wired for, and found him in bed. Beyond a little malaise and sore throat he did not feel ill, nor had he had any symptoms such as usually occur premonitory to an attack of diphtheria. At first it was thought to be follicular tonsillitis, but the appearance of membrane on the uvula and tonsils indicated that it was something more than this. No bacilli were found in the culture made, but prior to observing this I had expressed my doubts as to the disease being diphtheria. The course of events in this and similar cases is as follows: One or more points in the mucous membrane of the tonsils, soft palate, or uvula become infiltrated, appearing paler than the surrounding mucous membrane. The patch becomes paler and paler until nearly white. It is but slightly, if at all, raised, and has no sharply defined margin. Before becoming white the infiltrating material may be absorbed and the part resume its normal appearance; but when it has assumed the milky-white colour it finally peels off, leaving a shallow ulcer which speedily heals. It may or may not be associated with a mild form of tonsillitis. The constitutional disturbance, as a rule, is very slight, but occasionally there are marked premonitory symptoms—headache, nausea, languor, and slight fever—but these speedily pass away and the patient feels fairly well.

If these are not cases of true diphtheria—and I am inclined to think they are not—it is time we adopted some other name for the disease, as at present our notification returns are rendered useless by their inclusion with diphtheria. It is probably a disease having distinct specific characters, and as it is undoubtedly infectious it is almost certainly due to some micro-organism. With reference to this portion of the subject I shall have more to say hereafter. How should the medical officer of health regard such cases? Strictly speaking, he has no business to diagnose them, but to accept all notifications sent in and act upon them in the usual manner. Many cases occur, however, in which no medical man is called in, and which the medical officer of health may, with the permission of the patient and relatives, examine and diagnose. Any error in diagnosis may be of serious import. If regarded as not being diphtheria, and subsequent events prove that it is true diphtheria, an epidemic may be the result. Where there is the slightest doubt, therefore, the only safe plan is to regard them as cases of diphtheria, and insist upon all precautions being taken to prevent the disease spreading. These precautions will very rarely include the compulsory closing of an elementary school, the brief duration of the disease and its apparently trivial character not rendering such a course necessary. Besides this epidemic form of pseudo-diphtheria there are probably several other throat affections which simulate true diphtheria. Nearly two years ago a brother medical officer of health sent me a large piece of transparent membrane from a child's throat, together with a note saying that it was the most marked case of diphtheria he had ever seen. The membrane appeared to consist entirely of spherical cells, apparently a form of torula, and upon streaking some agar jelly the growth consisted entirely of such cells, which, on account of pressure, when viewed under the microscope, appeared hexa-, octo-, or polyhedral. Soon after a sporadic case occurred in my district, in which the same organism occurred, associated with bacteria, and a few months later the same patient was again notified as suffering from diphtheria, and again the torula was the most prominent feature of the growth obtained from the throat. In the same parish a case of diphtheria was notified in January, 1895, which yielded a similar organism, and quite recently a fourth case has occurred. I sent a culture tube of this through the Local Government Board to Dr. Klein, and he states that he has on one previous occasion met with the organism in a case of membranous rhinitis. He is inclined to regard it as the thrush fungus. In the last two cases the torula was more usually oval in form, whereas in the former cases the organism was spherical. Possibly they are allied but not identical species. Whether they are the cause or merely concomitants of the disease it is at present impossible to say. This is a subject upon which I am at present working.

One thing is becoming clear, that under the name of diphtheria we are including two, if not several, distinct diseases, due to the development of different organisms on or in the mucous membrane of the throat. Amongst the countless multitude of micro-organisms which occur in nature it would indeed be wonderful if one only were capable of developing upon nature's medium and in nature's incubator and of injuriously affecting its host. During sleep the back of the mouth forms the incubator *par excellence*, and many different organisms flourish there, more than one of which are probably capable of penetrating the mucous membrane and causing its infiltration and exfoliation, and the products of their metabolism, toxines, &c., becoming absorbed may be the cause of constitutional disturbances such as those described in connexion with the epidemics of "sore throat."

Chelmsford.

TWO CASES OF HYDATID DISEASE SURGICALLY TREATED.

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THE two following cases of hydatid disease which have come under my care during the last twelve months are, perhaps, worthy of record: the one on account of the rarity of the situation of the cyst—in the axilla—and the interesting diagnostic problems to which this accordingly gave rise; the other as further illustrating the success attending surgical treatment of even large and adhesionless hepatic hydatids.

CASE 1.—A young woman aged nineteen years, with a good family history and no previous ailments, first noticed a painless lump in the right axilla in August, 1893. She kept a pet dog, and also lived in a notoriously overcrowded and insanitary area. The diagnosis remained uncertain until the operation, although fatty tumour and chronic abscess had been suggested. The swelling was two inches and a half in diameter, and freely movable under healthy skin. She was admitted to the London Temperance Hospital on May 10th, and on the 21st she was placed under chloroform and an incision was made into the swelling. Clear fluid escaped and a white hydatid cyst shelled out; there was a fibrous quasi-sheath around this, composed of thickened tissues. Hooklets were found in a scraping of the cyst-wall. Healing progressed uninterruptedly, and the patient was discharged well on June 1st.

CASE 2.—A single woman aged thirty-three years noticed a swelling at the pit of the stomach in September, 1893. This was at first painless, but, increasing in size, began to be tender, and in December, 1894, she was admitted into the medical wards of the London Temperance Hospital under the care of Dr. Fletcher Little. I saw the case in consultation and diagnosed hydatid of the left lobe of the liver, and an exploring syringe verified the diagnosis by yielding hooklets in the withdrawn fluid seen under the microscope. She was accordingly transferred to my ward with a view to operation, the nature of the case and the treatment suggested having been explained to the patient, and her assent obtained. The patient's previous and family histories were good, and she appeared to be in fair health, with the exception of the abdominal tumour. Occupying the epigastrium and encroaching on the left hypochondrium was a firm, globose, slightly elastic swelling which gave a feeling of fluid, especially when bimanually palpated with one hand deeply pressed into the left ilio-costal space. The swelling was a little tender, dull on percussion, without any specific fremitus, and dumb. Its area of dulness was continuous with that of the liver. The heart was displaced a little upwards. On April 8th, 1895, Dr. L. Wilde administered chloroform, and I opened the abdomen by a median epigastric incision. The left lobe of the liver was unusually prominent and presentable and gave to the examining fingers the feeling of a bag tense with fluid. I inserted an aspirating trochar and withdrew thirty-seven ounces of opalescent fluid. Closing the enlarged opening with my finger, and later with swabs, while flat sponges were packed around the wound, I sutured the thinned and now flaccid liver lobe to the anterior abdominal wall, with little, if any, escape of hydatid fluid. The large cyst cavity was then completely emptied by suction with a glass syringe and a piece of india-rubber tubing attached to its nozzle. A large empyema drainage-tube with a flange was then inserted, and india-rubber sheeting fitted round it, over the gauze dressing, and brought out through a many-tailed bandage. The next day the patient was free from pain, the temperature was normal, and many ounces of fluid had come through the tube. Progress to recovery was uninterrupted; the highest temperature recorded was 99·4° F., on the eighth day. The fluid discharge gradually became less, portions of cyst-wall came away in abundance, and when collected there was sufficient to fill a four-ounce vessel. The fluid became more puriform; the tube, which was progressively shortened, was left out on June 13th, and the patient was discharged on July 18th, being quite well.

Albert-terrace, N.W.

A CASE OF CHRONIC GLANDERS IN A HORSE-SHOER.

BY GORDON SHARP, M.B., C.M. EDIN.

IN May, 1892, I saw a man aged twenty-three, engaged as a shoeing smith, who had worked among horses for years; the following was the history of his complaint. Three months previously to the time when I saw him he began to suffer from a disagreeable, foul-smelling, watery discharge from the left nostril. He consulted a medical man, who told him he had polypi of the nose. He gave him medicine to take and snuff to apply to the nostril. A week or two passed, and as the man did not improve

he went to the infirmary of the town in which he then lived and was admitted. There he remained for a few weeks and had some slight operation performed on the nostril, but without benefit, and he left the hospital and placed himself under the care of a consulting physician; but not only did the nostril not get well, but the eye on the same side became affected in the same manner as the nostril. After some weeks he sought relief at one of the Manchester hospitals and remained under treatment for a short time, during which some operative treatment was performed in the shape of scraping the nostril, followed by the application of caustics. The patient's condition got worse and he came home to his father's house, where I first saw him. From what has been said it will be seen that the disease had already ran fully a three months' course from the time of its being first noticed by the man himself. On examination the patient was found to have a foul watery discharge occasionally during the day, tinged with blood and pus, discharging from the left nostril. The nostril itself was red, and in parts it showed black sloughs, which on being removed revealed an underlying ulcerated surface. The left eye was red and inflamed and discharging fluids of the same character as the nostril. Immediately below the eye the tissue of the face had sloughed away, and the bone beneath was covered with black sloughs. The treatment at this stage consisted in removing the sloughs and making the parts as sweet as possible by the frequent application of strong corrosive sublimate lotion, followed by iodoform. The diet was generous, and a simple tonic

FIG. 2.

Illustration showing ragged state of the parts. Upper jaw-bone.

mixture was prescribed. There was no reason to suspect syphilis. For about three months the condition appeared as if improving, but at the end of this time the temperature gradually rose, getting as high as 100° or 101° F. in the evening; and at the same time the tissues of the nose and cheek rapidly necrosed, and in a fortnight's time a considerable area of the upper jaw-bone was laid bare and the side of the nose had nearly gone. Inside the mouth the hard palate was covered by a black slough, and an opening at the side of the nose on the left side led into the mouth. It was now felt that some drastic operative treatment was imperative, and it was only now that consent was obtained. It was by this time fully seven months since the disease was first noticed by the patient himself. The amount of tissue of the nose and cheek which had sloughed was so great that it was absolutely necessary to remove the upper jaw-bone, and with it the adjacent small bones, such as the nasal and lacrymal, in order to close up the wound, allowing for tissue necessary to be removed on account of its being unhealthy. On removing the bones a granulating mass the size of a walnut was discovered on the inside of the cheek, and exuding a foul discharge of the character already mentioned in connexion with the nostril. The force necessary for the removal of the bony mass caused the thin, carious anterior wall of the maxillary antrum to give way, and there exuded a dark-yellow thick pus intensely foul in odour. All the diseased tissues were removed, and strong nitric acid was applied to the granulating mass. The various parts were washed with strong corrosive sublimate lotion and then dusted over with iodoform, and a presentable face was the result. The bones removed were found soft in parts, especially over the anterior wall of the antrum. Black sloughs covered other parts, while in still other parts the periosteum showed red points. The pathological condition was evidently that of an infective cario-necrosis, but not of an acute type; but when an examination of the decalcified bone is made, the exact condition will be made out. The microscopic character of the discharge will be considered when I speak of the differential diagnosis. Although the eye was red and painful there were no special indications for its removal, and it was spared at this time. Improvement was marked for a week, but by the eighth day the edges of the wounds looked red and soon gave way, and rapid sloughing took place. The eye, too, became inflamed, and in less than a fortnight after the first operation the left eye had to be removed for a general inflammation of the organ. Between the seventh and the tenth days after the first operation the temperature showed a gradual rise, with unpleasant constitutional symptoms. The removal of the eye and scraping away of the necrosed tissue were attended by no benefit either local or constitutional. The lymphatic glands in the neck and under the jaw were not much enlarged, and although there was occasionally some bronchial catarrh the lungs were not markedly affected. The temperature kept high, especially at night, but it varied. Some nights it reached 101°, 102°, or even 103°, with a morning fall of one, two, three, and once of nearly four degrees. On the whole the tendency was for the temperature to keep high, but on one or two mornings there was a fall to nearly normal. One evening it went up to 105°. The course of the temperature pointed directly to a septicæmic process. Side by side with the rise in temperature the disease increased locally. The septum of the nose entirely necrosed, the remainder of the nose sloughed away, the bones of the other side were attacked, and the patient presented a horrible appearance, and despite the assiduous application of antiseptics the odour was overpowering and the necrotic process rapid in its increase. The discharge remained of the same kind throughout the entire course of the disease

FIG. 1.

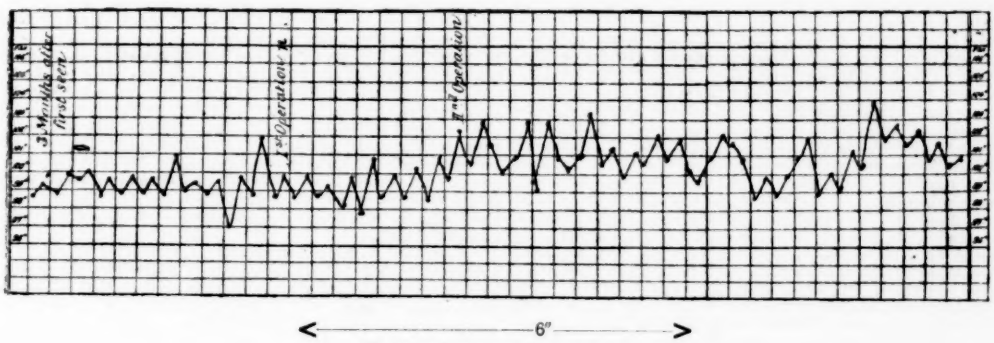


Chart showing course of temperature.

The man lingered on for a longer period than one would have expected from the large amount of local mischief, and the constitutional effects were less potent than one would have imagined, more especially that for months the patient must have carried some of the discharge into his stomach with every meal partaken of. He finally died of exhaustion some fifteen months after the first onset of the disease. An examination of the body after death was not obtained.

The diagnosis is difficult, but can be arrived at partly—(1) by exclusion; (2) by remembering the man's employment; (3) by the character of the discharge and its microscopic examination; and (4) by the seat of the disease. Syphilis is excluded by the history, by the absence of other signs, and by the little effect that mercury had on the course of the disease. Actinomycosis was thought of, but an examination of the pus from the antral abscess showed no ray fungus. A simple infective necrosis was excluded by the chronicity and by the elective seat of the disease. Cancrum oris was thus excluded. One is narrowed down to accept chronic glanders as the true diagnosis, and in favour of this we have (1) the man's employment as a shoeing-smith; (2) the original position of attack of the disease—namely, the nose; (3) the nature of the discharge, offensive, watery, and often tinged with blood and pus; (4) the extensive necrosis of soft parts, bones, and cartilage; (5) the fatal results; and (6) the microscopic revelations. A specimen of the discharge was placed on a cover-glass, dried in the flame of a spirit lamp, and stained with alkaline methylene-blue, washed in very dilute acetic acid, then in water for a considerable time, and dried and mounted and examined under both low and high powers. No characteristic club-shaped bodies could be seen as found in actinomycosis, but organisms something of the size of the tubercle bacillus were seen in great numbers. Whether these were the bacilli mallei of glanders I am unable to say for certain, for I was at the time unable to find a detailed description of that organism; but altogether the chances are that they were so. (Since writing the foregoing I have been able to satisfy myself that they were the bacilli in question.) Glanders is a very rare disease in the human being, and especially so in Great Britain, and if we take 100,000 deaths probably hardly one is due to this affection. Thus every case which occurs is of sufficient interest to be worth publishing.

Leeds.

TRANSFUSION OF SALINE FLUID; SIX SUCCESSFUL CASES.

BY NATHAN RAW, M.D. DUBH., &C.,
MEDICAL SUPERINTENDENT AND PATHOLOGIST, DUNDEE ROYAL INFIRMARY.

HAVING for some years employed transfusion of saline fluid in all cases of hæmorrhage where a fatal issue threatened, I beg to place on record some successful results in the hope of encouraging others to adopt this simple and efficacious means of saving life in these cases.

CASE 1.—A young woman aged twenty-four years, suffering from all the symptoms of gastric ulcer, went for a walk and was seized with violent hæmatemesis. She fell fainting in the street and was carried to hospital. It was estimated she had lost several pints of pure blood. On admission to the Bolton Infirmary she was quite unconscious and pulseless, conjunctival reflex was abolished, the respiration was sighing, and the extremities were cold and clammy. She was given the ordinary styptics, ergotinin, &c., but as she was rapidly sinking she was transfused with normal saline solution—one drachm of chloride of sodium to a pint of sterilised water heated to 100° F. Altogether four pints were injected into the median basilic vein, with wonderful effect. She slowly recovered and is now (four years later) quite well.

CASE 2.—The patient, a woman, was suffering from exhaustion through long-continued suppuration of the knee-joint, which was amputated. The immediate shock of the operation was sufficient to cause serious syncope, although very little blood was lost. Immediately after amputation of the thigh she showed serious symptoms of collapse and was pulseless. The median basilic vein was at once opened, four pints of the fluid were injected, and at the same time internal stimulants were given and external heat applied. In a short time she revived and made a good recovery.

CASE 3.—A robust man was admitted to the infirmary with compound depressed fracture of the occipital bone, opening into the lateral sinus. He was brought in as dead, having lost an enormous quantity of blood. I at once elevated the bone, removed a large piece (2 in. by 2½ in.), and plugged the lateral sinus with gauze. I then transfused him with four pints and a half of saline solution, with the result that he made an excellent recovery and is now at work.

CASE 4.—A man was admitted who had cut his throat. He was found by the police in a field, where he had lain all night. On admission he was unconscious and pulseless. He was at once transfused with the fluid (3½ pints) and slowly recovered.

CASE 5.—A young man aged twenty years was admitted "carried on a door." He had a large varicose ulcer which had suddenly opened into the internal saphenous vein. On admission he was unconscious and pulseless, with sighing respiration. The median basilic vein was opened, but it was difficult to introduce the cannula, as the veins were so much collapsed. Four pints of saline fluid were injected, with the result that the patient recovered.

CASE 6.—This proved to be a marvellous one. A man was knocked down by an engine on the railway. His right arm was cut off above the elbow, and he had a compound fracture of the skull. He was quite unconscious and had lost a quantity of blood. When admitted I did not expect him to live many minutes; I, therefore, hurriedly tied the main vessels of his arm and opened the internal saphenous vein. I injected, in all, eight pints of normal saline solution, with marvellous effect. His pulse improved at once, and although he remained unconscious for ten days he made a good recovery.

Remarks.—I have transfused in a number of cases of severe accident where hæmorrhage and shock have been combined, but unfortunately without such good results as in hæmorrhage only. The *modus operandi* is simple. An incision two inches long is made obliquely in the line of the vein, which is tied with a single loop of catgut at its lower end, a loose ligature being placed at the upper end of the vein. Between the ligatures the vein is opened, and a small straight glass cannula is introduced. To this are attached two yards of small rubber tubing with a small glass funnel holding four ounces. The cannula is securely tied in the vein, and then all is ready. The greatest care must previously have been taken to exclude all air from the tubing and cannula by filling them with the solution. The solution is prepared by adding one drachm of chloride of sodium to each pint of carefully sterilised water heated to 100° F. The fluid is poured in slowly and the limb raised to allow it to flow more easily. In this way several pints may readily be introduced. After sufficient has been given the vein is tied above and below, the skin sutured, and the wound dressed antiseptically. I have often left the cannula in the vein so as to allow more fluid to be injected on different occasions at short intervals. In my opinion the only danger to the patient is from the introduction of air; but with care this can always be avoided. The procedure is so simple that I can strongly recommend its use, as sometimes apparently most hopeless cases may be saved.

Dundee.

A VACCINATOR'S DEPUTY.—Some weeks ago, it will be remembered, the Local Government Board inspector, in complaints which he made against two public vaccinators of the East Preston (Sussex) Union, protested against the regular employment by such officers of deputies. Both gentlemen were communicated with and their subsequent explanations referred to the Board. One, who undertook to amend matters, is no further referred to. In the other case, however—that of Mr. Evershed of Arundel—the Local Government Board think that if he is unable or unwilling to perform habitually in person the duties which he had undertaken the guardians should terminate their contract with him and appoint some other medical practitioner as public vaccinator. It is stated that in 1892 Dr. Sweeting cautioned Mr. Evershed upon this point and another with respect to the keeping of his register. This decision having been communicated to Mr. Evershed, he has now tendered his resignation of the office. It may be worth adding that another Sussex medical officer has since resigned in one of the western unions, and gives as his reason that he can no longer himself undertake the duties of the office.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF CHRONIC INVERSION OF THE UTERUS CURED BY AVELING'S REPOSITOR; REMARKS.

(Under the care of Dr. G. E. HERMAN.)

WE have lately published in the columns of THE LANCET[1] the account of a case of inversion of the uterus of recent origin, where treatment by manipulation was successfully carried out and the reduction effected in a short time under an anæsthetic. In the following case the inversion was of six months' duration and required a more prolonged treatment to effect a cure; it was, in fact, one of those for which this repositor was specially made. The mode of action of this instrument is thus described in the communication made by Dr. Aveling, as referred to by Dr. Herman. Reduction takes place by the cervical method. Newnham advised this method of reinversion in 1818. He said: "It is wisest and best to endeavour to reinvert the uterus by returning first that portion of it which was last expelled from the os uteri." Pressing on the uterus causes counter-vaginal traction on the cervix, making it unroll gradually until the internal os is reached, where a little delay is caused by its being less dilatable. When this point is passed the body of the uterus soon opens and admits the cup. The last step must take place rather suddenly, for all patients say that something has "given way" and comparative comfort is the result. For the notes of the case we are indebted to Mr. W. Eardley, clinical clerk.

A patient aged twenty-three was admitted into the Victor Ward of the London Hospital on Nov. 21st, 1894. She had had one child, born in the preceding May. The labour was difficult; instruments were used, there was much bleeding afterwards, and she kept her bed for six weeks. She had never been well since, having been losing blood almost continuously. When not losing blood she had a yellow discharge. She had had no pain. On vaginal examination a rounded swelling about the size of a walnut was felt projecting through the os uteri. The patient did not manifest pain when it was touched. The sound could not be passed up beside it, and by bimanual examination it was found that the body of the uterus was not situated in its proper place above the cervix. The diagnosis of inversion of the uterus was clear. On Nov. 30th Aveling's repositor was applied, the tapes being so fastened that the elastic bands by which the upward pressure was applied were moderately tense, but not at the utmost tension they would bear. The repositor caused a good deal of pain, with at first vomiting. It was removed, the state of the uterus examined, and the repositor readjusted on Dec. 1st, 3rd, 5th, 8th, 11th, 13th, 15th, 17th, 19th, and 21st respectively, various changes being made in the size and shape of the cup used, but the tension on the elastic bands being about the same. Each time the repositor was removed it was found that the inversion was unreduced, although it was thought that the fundus uteri was pushed a little higher up. The patient had suffered a good deal from pain and nausea while wearing the repositor, and therefore she was allowed a few days' rest before proceeding further. On Jan. 18th of this year the repositor was again adjusted; but this time the tapes were so secured that the elastic bands were stretched to their utmost tension. On the 20th the uterus was still unreduced. On the 21st the patient's temperature was 102° F. and she complained of great pain. On examination the cup was found within the cervix, the fundus uteri being in its normal position. The patient was discharged cured on Jan. 29th.

Remarks by Dr. HERMAN.—Inversion of the uterus is so uncommon, and so short a time has passed since it was regarded as incurable and often treated by amputation, that cases which exemplify its curability are still worth reporting. The case above related shows an important practical point, which is that for the reduction of chronic inversion of the uterus pressure must not only be continuous but powerful. Reposition did not take place until the elastic bands had been so tightened that their utmost power was exerted. More gentle pressure, though continuous, and protracted with short intervals for three weeks, failed to cure. I regret that I did not measure the tensile strength of the bands. Dr. Aveling, in his latest account of his repositor and its use,[2] laid stress on the importance of seeing that the instrument was furnished with elastic bands of the proper kind, from which I gather that he had found that power as well as continuity of pressure was needed. The case shows also another and less important point—viz., that great tenderness of the inverted uterus is not always marked enough to be of use in distinguishing the inverted uterus from a polypus.

[1] THE LANCET, July 27th, 1895.

VICTORIA HOSPITAL, BHOPAWAR AGENCY, CENTRAL INDIA.

CASE OF NEURALGIA OF KIDNEY; NEPHROTOMY; RECOVERY.

(Under the care of Surgeon-Lieutenant-Colonel DUKE.)

NEURALGIA of the kidney, independently of the presence of calculus or gross change, is a condition which is not usually mentioned in our text-books or even in special treatises on the subject of renal disease. It has, however, been long recognised that in certain cases of painful kidney, when stone was suspected from the symptoms and nephrotomy performed, relief might follow, although no stone was found. More than this; in two cases with this history no disease was found after thorough examination of the affected kidney on a subsequent occasion. The proof afforded by these two cases is of great importance, for the difficulty experienced in feeling a stone through the kidney substance is frequently insuperable, and at the first examination of these cases the renal pelvis does not appear to have been explored. Dr. L. McLane Tiffany[1] of Baltimore cut down on a kidney the seat of intense and recurring neuralgia of several years' duration, explored it thoroughly, and, not finding any stone, split the capsule for three inches and obtained a cure. The incision was made through the capsule with the idea of relieving tension.

The patient, a fine-looking widow aged thirty-five, childless, had suffered for more than four years from attacks of agonising pain in the left loin. She could fix the spot with her thumb, this being a point a little below, and close to, the left twelfth rib. A circular scar, the result of "firing" in previous years, was visible here. In character the pain was paroxysmal, while the agony endured was most acute, the body being doubled up in severe colic, and the teeth and hands clenched. The attacks lasted from half an hour to two hours, being often followed by a good deal of exhaustion. They came on two or three times a month, and from being a strong, powerful woman she became thin and weak. In the intervals her health was good. Morphia injections, Indian hemp, chloral, and bromides gave merely temporary relief; but during the acme of an attack only chloroform anæsthesia was of any practical use. Menstruation was scanty. Vaginal examination showed neither tenderness of the ovary nor disease of the womb. The urine was normal. No gravel or blood had ever been passed. Thus stone in the kidney and ureters, as well as ovarian and uterine mischief, were excluded. Movable kidney alone remained to diagnose. The most careful examination under chloroform, however, failed to detect any movement or transposition of this organ. The diagnosis could not be determined, but the woman prayed for relief. About this time, in the *Medical Annual* for 1894, under the heading "Surgery of Kidney," I read evidence which convinced me that the patient was suffering from neuralgia of the kidney, and that nephrotomy might cure her. That journal quotes a case under the care of M. Guyon in which nephrotomy was performed, the patient having all the classical symptoms of renal calculus. No calculus was found, but the patient was relieved. Similar cases are

[2] Brit. Med. Jour., vol. i. 1886, p. 475.

[1] Sajous' Annual of the Universal Medical Sciences, 1890, vol. iii., E 30.

reported by Sobater, Durham, Reynaud, Tiffany, Bloch, and Hurry Fenwick. The diagnosis having been now settled, and as the patient, whose life was a burden to her, implored for relief, it was determined to operate. On July 1st, 1894, assisted by Surgeon-Major Mosse, A.M.S., the operation was carried out. Owing to the presence of fat, the last rib was made out with difficulty. An incision five inches in length was then made parallel to and three-quarters of an inch below the last rib, dividing the usual structures and exposing a layer of fat of considerable thickness. This was cut through, as well as were the deeper fascia and fibres of the external oblique, leaving a wound of considerable depth, so that the structures were not so easily defined *in statu* as they are graphically described in print. More muscular fibres, including the edge of the quadratus lumborum, required division, the latter freely with scissors. By dilating the parts the kidney was just drawn into sight, and the fat and fascia covering it were opened, when the gland, looking very livid and congested, came into view. By firm pad pressure from the front, aided by Thornton's broad forceps fixed to the fascia, the kidney was raised and drawn well into the wound. Its convex surface, along the whole length, was then incised to the depth of one-tenth to one-eighth of an inch. A crucial cut was next made to the same depth. The bleeding which followed was easily checked by sponge pressure. The wound was now freely irrigated by carbolic solution (1 in 40), which appeared to act strongly on the tissues. (This is noted, as Surgeon-Lieutenant-Colonel Duke thinks that absorption took place with subsequent irritation.) A drainage-tube having been laid along the whole length of the kidney, the deeper wound was closed by three and the upper by six (No. 13) Chinese silk sutures. Ferrocyanide gauze and cotton wool, held in position by a wide flannel bandage, completed the dressing. The operation occupied upwards of an hour. Half a grain of morphia was subsequently injected subcutaneously. The after-progress was as follows. On July 1st, at 10 P.M., there was much sickness, burning pain in the wound (tension), and also some abdominal pain. On the 2nd, at 7 A.M., the dressings were changed, as they were soaked with serum. At 10 A.M. vomiting, nausea, and abdominal pain occurred. There was still severe burning in the wound. At 5 P.M., fearing peritonitis, and acting on Mr. Lawson Tait's advice, the following draught was given: three drachms of sulphate of magnesia, one drachm of sulphate of soda, and two scruples of potassio-tartrate of soda, in two ounces of very hot water. At 10 P.M. there had been no vomiting since the administration of the saline draught. The pulse was 120 and the temperature 102° F. Fifteen grains of antipyrine, given to reduce fever, were vomited with green bile. A second dose of fifteen grains was retained. On the 3rd the bowels were moved freely once in the night. At 10 A.M. the dressings were changed. The wound was found to be quite sweet. There was very little red sanious discharge; owing to their evident tension, Surgeon-Lieutenant-Colonel Duke removed the highest and the lowest sutures. The urine was smoky, like that of carbolic acid poisoning. An effervescing draught was given with prussic acid and belladonna, and repeated at 4 P.M. At 9 P.M. the urine was coffee-coloured. The patient was in much distress. The bowels were moved four times in the day. At 10 P.M. the pulse was 116 and the temperature 102°. One-sixth of a grain of pilocarpine with ten minims of water were subcutaneously injected as a diuretic. At 10.30 P.M. fifteen grains of antipyrine were given in an effervescing draught. On the 4th, at 10 A.M., the patient was cheerful and had passed a good night. The pulse was 100. The urine was almost normal in colour. The wound was sweet, with very little discharge. Three more sutures were removed (unwisely). At 4 P.M. there were signs of menstruation. On the 5th, at 10 A.M., the wound was still sweet, and the remaining suture was taken out. The wound had united in the centre, but not at the upper and lower edges. Strapping was applied. The patient was very cheerful. The abdomen was lax and free from all pain. On the 7th the patient was doing well. On this day Surgeon-Lieutenant-Colonel Duke went on leave, and Surgeon-Captain Davoren, A.M.S., kindly took over the case. To curtail the report, it is only necessary to add that the sutures were removed too soon. In consequence the edges gaped, and the wound did not heal by granulation until July 27th, when only a small drainage-tube opening remained, all eventually closing well and strongly.

Remarks by Surgeon-Lieutenant-Colonel DUKE.—Speaking generally, the chief difficulty in either medicine or surgery is correct diagnosis; this once definitely settled, a certain line of treatment can usually be satisfactorily carried out. The case described above is one where a correct diagnosis was attended with difficulty. The patient was examined by me eleven months afterwards. The parts were firmly healed, and there was no tendency to bulging or weakness of the wall. Since the day of the operation there has been no return whatever of the original pain; and, as far as this is concerned, the patient is cured.

Reviews and Notices of Books.

Leprosy in its Clinical and Pathological Aspects. By Dr. G. ARMAUER HANSEN, Inspector-General of Leprosy in Norway, and Dr. CARL LOOFT, formerly Assistant Physician to the Lungegaards Hospital. Translated by NORMAN WALKER, M.D., F.R.C.P. Edin., Assistant Physician for Dermatology, Edinburgh Royal Infirmary. Bristol: John Wright and Co. London: Simpkin, Marshall, Hamilton, Kent and Co., Limited. 1895.

THIS work, illustrated as it is with numerous photographs and coloured plates of the microscopical appearances of the disease, strikes us as an excellent contribution to the subject of which it treats. In less than 150 pages, if we exclude the plates, the authors have succeeded in telling us all that is really known about leprosy in its clinical and pathological aspects. They speak from a large and extended experience and have taken every advantage of their opportunities to verify their observations and present the reader with a comprehensive statement of the result of their studies. The book is written in a scientific spirit and lucid style, and appears to have been very well translated by Dr. Norman Walker. The chief feature of the book is the manner in which the course of the disease is explained by the development of the special bacillus to which the disease is now—and correctly in our opinion—attributed, for the bacillus leprae can be demonstrated in all leprous products, and we may practically conclude that leprosy is a chronic disease caused by it. Since the publication of Danielssen and Boeck's work in 1847 leprosy has been clinically recognised in two forms, the "nodular" and "anæsthetic"; but, as the authors observe, this nomenclature cannot be regarded as, scientifically speaking, accurate, for the line of demarcation between them is not always easily defined. Skin affections are present in both forms, and the nerves are affected in the nodular as well as in the other form, although not in the same striking way. Still the division corresponds to two clinical types under which a majority of the cases of leprosy can be arranged, and has, moreover, been generally accepted. The authors, recognising the importance of not unnecessarily disturbing an existing and familiar nomenclature, describe the two forms of the disease as *Lepra tuberosa* and *Lepra maculo-anæsthetica*. As the leprosy bacillus is present in both forms, and in every case of nodular leprosy sooner or later the nerves become involved, if only the patient lives long enough, it may be taken that there is an essential unity between the two forms, and the authors consequently do not recognise the name of "mixed leprosy." Chapter II. is taken up with a graphic and interesting description of nodular leprosy, easily diagnosed as a rule by its characteristic skin affection. Chapter III. describes the structure and the microscopic and bacteriological appearances of the leproma, with the aid of some admirable illustrative plates. Chapters IV. and V. treat of lepra maculo-anæsthetica and its pathological anatomy. These chapters are excellent. The diagnosis and prognosis of the disease, its etiology and treatment, with numerous tabular statements, follow. Isolated extracts taken here and there from the volume would

only give the reader a meagre idea of its merits: the book requires to be read as a whole, and we advise all who are interested in the subject to do so for themselves, for it contains much valuable information about this terrible disease. The authors regard the isolation of lepers as the only reliable means by which the spread of the disease can be checked, and they furnish some important statistical evidence of what can be accomplished in this respect. The disease is dependent on a bacillus, but the inquiry hardly narrows itself down into a study of the means by which the bacillus effects its entrance into the body, though study in this direction affords room for interesting inquiry. It does not seem that the exhibition of any known bactericide cures the disease, although patients occasionally recover.

Lectures on Genito-urinary Diseases. By J. OGILVIE WILL, M.D., C.M., F.R.S.E., Consulting Surgeon to the Aberdeen Royal Infirmary and Examiner in Surgery in the University of Aberdeen. London: The Scientific Press, Limited. 1894.

THESE six lectures have the great merit of being thoroughly practical and of giving the results of mature experience in dealing with a frequently occurring class of ailments. Urethral fever, catheter fever, and the treatment of retention of urine are subjects of abiding interest to every surgeon, and it is to the consideration of them that Dr. Ogilvie Will devotes his opening chapters. He ascribes to Sir Andrew Clark the credit of drawing the attention of the profession to certain dangers of ordinary catheterism, the least serious of which is a well-marked but short attack of pyrexia following the dilatation of a stricture by means of a bougie. This attack is usually ushered in by a rigor, which supervenes most commonly in the next act of urination. The temperature may rise to 104° or 106° F.; there is profuse sweating, and next day the patient is quite well, or nearly so. This is the so-called urethral fever, and is insignificant in comparison with the symptoms which catheterism may set up in men suffering from retention due to enlarged prostate. In these cases the patient two or three days after the commencement of catheterism becomes sick and feverish, and may gradually lose strength until his sufferings terminate in death after the lapse of three or four weeks. Post mortem the bladder is found to be inflamed and sloughy, the kidneys are riddled with small abscesses, and micrococci abound everywhere. The most probable explanation of these pathological changes is, in the author's view, the introduction of putrefactive atmospheric germs into the bladder along with air admitted through the empty catheter, and the obvious preventive is never to completely empty an over-distended bladder. For retention caused by strictures too tight to admit a No. 1 English catheter the author recommends the passing of a filiform bougie, followed by a metallic catheter screwed to its end. For prostatic retention he generally employs Mercier's elbowed catheter. Silver catheters should never be fastened into the bladder, but flexible instruments may be left in position. The remaining lectures are on Gleet, Hydrocele, Varicocele, and the Treatment of Acquired Syphilis. The author regards syphilis as curable, and is in the habit of giving mercury continuously for the first six months, commencing its use during the primary stage. The work bears a somewhat too comprehensive title; it can, however, be highly recommended as a text-book on the subjects of which it treats.

Atlas of the Diseases of the Skin. By H. RADCLIFFE CROCKER, M.D., F.R.C.P., Physician to the Department of Diseases of the Skin, University College Hospital. Parts VII. to X. London and Edinburgh: Young J. Pentland.

THE four parts of this most admirable atlas which have appeared at regular bi-monthly intervals since our last notice fully maintain the high standard of excellence with which the publication commenced. With hardly an exception the drawings are strikingly natural and have been reproduced with much fidelity, whilst the accompanying text is for the most part wisely limited to a brief description of the disease depicted and the history of the case from which the drawing was made. Each part contains six plates, and as some of these bear more than one figure, it is clear that when finished the Atlas will be as complete in range as it is excellent in design. Amongst the drawings to be found in the parts before us which may be singled out for special mention are those of prurigo, impetigo contagiosa, psoriasis guttata, and pigment anomalies in Part VII.; of herpes and of psoriasis in Part VIII.; of hydroa herpetiformis, psoriasis punctata, and ichthyosis congenita in Part IX.; and of elephantiasis, seborrhœa, alopecia areata, and tinea versicolor in Part X.; but where the general standard of excellence is so good it is not easy to make any marked selection. In Part VII. there is an illustration of the severe disease, pemphigus vegetans, the text giving a detailed description of the clinical features of the case and the post-mortem examination. The illustration of Barbadoes Leg (elephantiasis tropica) in the same part is from a museum specimen of the amputated leg of a negro in Barbadoes. The characteristics of chloasma uterinum, leucoderma, and melanoderma are well shown in the drawings to be found in this part; and we may contrast with these pigmentary disorders the remarkable cases of argyria and chrysarobin erythema which are depicted in Part VIII. That of argyria is singular in the fact that the only apparent source of the silver impregnation was the use of a gargle of nitrate of silver thirty years previously. An illustration of xanthema diabeticorum serves to evoke an account of the points of distinction between this and the ordinary form of xanthema. The subjects of rodent ulcer and epithelioma are illustrated by eight figures, including one of "Paget's disease" of the scrotum. One of the plates in Part X. contains four figures of some of the more frequent "vaccination eruptions"—viz., impetigo, vaccinia-lichen, and a peculiar rash of erythematous type spreading from the vaccinal site and attributed to microbic infection. We can only reiterate our belief in the great value and utility of this work, for the production of which both author and publisher deserve much commendation.

An Australian in China. By G. E. MORRISON, M.B., C.M. Edin. London: Horace Cox. 1895.

ANY book about China will be read at the present moment with increased interest, on account of the terrible massacres of our fellow countrymen that have recently taken place. Dr. Morrison, who travelled from Shanghai along the Yang-tse-Kiang as far as Sinfu, and then turned off in a south-westerly direction to make his way to Burmah, has written a most readable and interesting book. He gives us a more favourable impression of the country than we are accustomed to hear from modern travellers, and, indeed, he seems to have met with nothing but kindness and courtesy; but, then, his mission did not clash with existing interests. His plan was not to make himself offensively ostentatious, but to let the Chinese really understand that he was their superior, and occasionally to be condescending. We are convinced from our experience of travel in the East that this is the best way of dealing with Orientals. Rudeness must be carefully avoided, but on the other hand the "distinguished stranger" attitude must be carefully preserved. Dr. Morrison shortly sums up the Opium Question thus: "The Chinese do not want our opium—it competes with their own." This, we fancy, is the whole question in a nutshell. Chinese medicine is much more complicated than that of the West,

and the great thing to be able to do is to feel the pulse correctly. "The pulses of a Chinaman vary in a manner that no English doctor can conceive of." We commend the following to the notice of Dr. Oliver for his next edition of "Pulse Gauging": "Death is no further off if the pulse seems like a fish whose head is stopped in such a manner that he cannot move, but has a frisking tail without any regularity; the cause of this distemper lies in the kidneys." We might go on quoting the whole of Dr. Morrison's delightful book, but we will instead recommend everyone to read it. Anyone will be interested with it, and anyone who has ever "heard the East a-callin'" will be doubly charmed.

Analytical Records FROM THE LANCET LABORATORY.

DRY IMPERIAL CHAMPAGNE "SANS SUCRE."

(MOET AND CHANDON; LONDON: SIMON KINGSCOTE AND CO., CRAVEN HOUSE, NORTHUMBERLAND-AVENUE, W.C.)

IT is well known that champagne is "forbidden fruit" to many on the score of its burden of sugar—a fact which has led Messrs. Moet and Chandon to introduce a wine possessing all the esteemed characters of a choice vintage champagne, yet which may be taken as freely and as safely as claret as regards its sugary constituents. In view of the importance of this introduction in connexion with its reputed adaptation to the requirements of those to whom sugar is prohibitive or objectionable, we submitted the wine to exhaustive analysis with results which were very satisfactory in this regard. It contained alcohol, by weight 11·38 per cent., by volume 14·09 per cent.; extractives, 2·43 per cent.; total sugar, 0·65 per cent.; total acidity reckoned as tartaric acid, 0·98 per cent. One pint of the wine contains, therefore, about 60 grains of sugar, an amount which is one-tenth less than that of some wines, and at least one-third less than that contained in the generality of specimens. The presence of a small quantity of extractives is furthermore in its favour for the special requirements indicated. In short, it is a generous, exhilarating wine by no means lacking the agreeable qualities of an excellent brand of champagne, yet containing but a minimum of those constituents which may be prejudicial.

KARSWOOD CREASOTE.

(E. G. HUGHES, VICTORIA-STREET, MANCHESTER.)

Karswood creasote is described as a new distillate of "sweetwood" creasote, and is, we find, a very pleasant-smelling, aromatic, clear, colourless, oily, and volatile liquid, which has been employed with advantage in bronchitis and other respiratory affections by the simple plan of inhaling a small quantity of it placed upon a handkerchief. About one-third of it consists of a light oil, boiling at 80° to 81°C., which is the pleasing fragrant portion. The rest distils at approximately the same point as wood creasote oil. Karswood creasote is one of the pleasantest volatile antiseptics that has come under our observation, and is doubtless very suitable, as it is very agreeable, for the purposes of inhalation. It therefore deserves to be more widely known.

CABINET WHISKY.

(CHAS. BLUNDELL AND CO., 63, QUEEN VICTORIA-STREET, E.C.)

The taste as well as the results of analysis of this spirit were alike favourable in respect to its quality. It is well matured and soft to the palate. On expelling the alcohol by distillation the residual liquid developed a marked aromatic smell characteristic of the resinous constituents of wood. "Cabinet Whisky" is stored, it is said, for eight years before it is placed upon the market, which step, combined with evident skill in blending, is the chief factor in producing a pure and wholesome spirit. On analysis the following results were obtained: alcohol, by weight 39·80 per cent., by volume 47·13 per cent.; proof spirit, 82·59 per cent.; extractives (due chiefly to storage), 0·59 per cent.; mineral matter, *nil*; total acidity, reckoned as acetic acid, 0·03 per cent. Its freedom from acidity is noteworthy.

PEPTENZYME.

(NEW YORK: REED AND CARNRICK; LONDON: THE PEPTENZYME CO., 25, ALFRED-PLACE, S.W.)

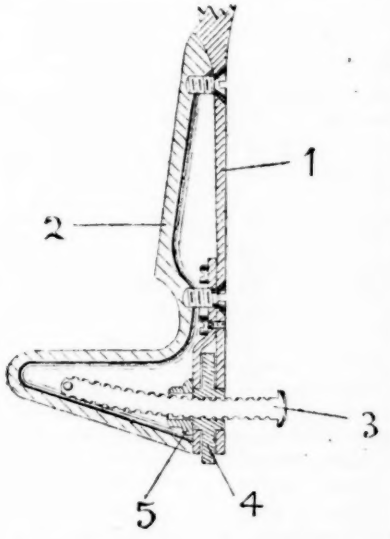
Apart from containing the proteolytic ferments, this interesting preparation may claim also to belong to that important class of bodies of organic extractives, like the extract of thyroid, for example, which have come into use so prominently of late in the treatment of disease. In a description of its properties and preparation it is stated that "1000 each of the following glands are taken: the salivary, peptic, and pancreatic, Lieberkühn's and Brunner's, and the ferment extract of 1000 spleens and livers, so that peptenzyme contains a proportional quantity of the enzyme principles of the whole series of digestive organs, and acts as the secretions of the natural organs in life, since they have not been injured during the process of isolation." To one part of this "isolated protoplasmic, active ferment and latent enzyme" in the form of powder, which is slightly benzoated, 1½ pts. of powdered sugar, 1½ pts. of milk sugar, and ¼ pt. of citric acid are added. We were able in our laboratory experiments to confirm its proteolytic activity, both in alkaline and acid media; of the results of its practical administration, however, we cannot here speak. Mr. Carnrick describes peptenzyme, the preparation of which is his own discovery, as a combination of the active ferments and *undereloped* enzymes of all the digestive organs or glands in the same physiological condition as they exist in nature and in all stages of development. Further, the process of preparing it is a "mechanical one, whereby the digestive organs immediately on being taken from the animal are freed from fat, water, and fleshy tissues by machinery, carefully dried, powdered, and sifted, and the digestive cells preserved and mixed in the same proportion and in exactly the same state of development as they existed at the moment the animal was slaughtered." Again: "It must be borne in mind that the most important contents of the digestive organs or glands is the delicate mother-enzyme principle that has not reached an active state of development." "This consists first of the requisite protoplasmic material, selected from the blood by affinity and in various stages of development, reaching at last the mature ferment and capable of changing food into the assimilable form." The cells and protoplasm in "peptenzyme," being in a dry state, with their structure and plasmic material uninjured, are said to retain their vitality unimpaired. Peptenzyme claims to be a distinct advance on compounds which are merely peptonising. It may be procured in the form of tablet, powder, or elixir.

New Inventions.

A NEW ADJUSTABLE LOCK FOR OBSTETRIC FORCEPS.

THE lock consists of a flat racked bar (depicted in the figure at 3) which can be propelled from one handle (2) to the other by turning a small wheel through the centre of which the bar passes. The wheel is inserted in the handle, and the hole in its centre through which the bar passes is a screw. The bar, by the continued action of the wheel, can be made to pass to and enter an oblong opening in a similar wheel (4) inserted in the opposite handle, and by a half-turn of the wheel the head of the bar, which is also an oblong, can be there retained. When not in use the bar can be screwed into a

hollow in the handle. The alteration Mr. E. MacWilliam Bourke makes in the forceps is merely extending the end of the handles about one inch to allow of the bar being retained, and the insertion of a small wheel in each, which projects just sufficiently to allow of its being turned by the finger and thumb. By the use of the bar compression can be



regulated and also a perfect lock obtained which can be freed by a half-turn of the wheel which is inserted in the opposite handle to that from which the bar projects. The lock can be put on any existing forceps, it does not interfere with its balance, and its cost is very slight. Mr. Bourke's idea has been carried out by Messrs. Arnold and Sons, West Smithfield, from whom the forceps may be obtained.

RIVER POLLUTION IN LANCASHIRE AND CHESHIRE.

MANY of the rivers of Lancashire and Cheshire—notably the Irwell and Mersey, with almost the whole of their tributaries, and the lower portions of the Ribble, with, more especially, the Calder falling into it at Whalley Abbey—have been the receptacles of sewage filth and manufacturing refuse for so long that the prospect of material improvement has appeared hopeless. Now, however, the outlook, though far from brilliant, is somewhat less depressing, as more energy is being displayed by the various authorities. The Ribble, one of the most beautiful of northern streams and dearly loved by anglers of all degrees, has suffered much from pollution, which has caused from time to time great destruction of fish life. The loss of the money value of the trout, salmon, and other fish is the least of the evils attending this destruction, and is a trifle compared to the interference with a pleasurable and healthful recreation, with the various trades and occupations dependent thereon, and also with the injury to the amenities of life resulting from the degradation of what should be one of the most beautiful and charming elements of scenery to the condition of a disgusting and evil-smelling sewer. But those who still cherish the hope for better things have been encouraged by the issue of a recent action by the Ribble Joint Committee against the Accrington and Church Sewerage Board for polluting two tributaries, one being the River Calder. In December, 1893, the board was ordered to adopt within eighteen months means for stopping the pollution, but nothing was done. The Ribble committee proved that for twenty-eight days from June 12th last "the defendants had made default in complying with the requirements of the order of the court." One of the "strategical proceedings" of recalcitrant authorities seems to be what is called experimenting. The analytical chemist to the Accrington board had been experimenting as to the best precipitant, at a cost in chemicals of from £50 to £300 per annum, and a member of the sewerage board was stated by a witness to have said at a meeting: "While we are experimenting we are delaying, and that is what we want." It also came out in evidence that another member had said: "I believe we have more to gain by delaying than by hurrying." The judge said there had been unjustifiable delay. "The carrying out of the Act was very unpopular, because it affected very little the persons called on to spend money in purifying the effluent—the sewage ran down the river and poisoned someone else." This being the first case "he would impose a penalty of £10 a day, making £280, with costs on the higher scale." The full penalty is £50 per day. The joint committee of the Mersey and Irwell and the Manchester corporation are in a somewhat peculiar relation. Both bodies are anxious for the purification of the Irwell above Manchester and Salford, but the committee wants more energy shown in dealing with the sewage of these cities themselves and a better effluent from them. The filthy condition of the Irwell has been patiently endured for many years, but since the completion of the Ship Canal the evil consequences of its continued pollution have been more keenly realised. From the most distant parts of the watershed it increases steadily as Manchester and Salford are approached, and the same may be said as regards the Mersey down to its junction with the Irwell. It must be admitted that Salford, notwithstanding her shortcomings, has for years past endeavoured to bring the law to bear on the various authorities above, though with little effect. Manchester has not done much to help in the matter, not so much, perhaps, from want of will as from the fact that Salford stood in the position of conservator. But however virtuous their attitude towards the delinquents above, they have both been guilty as to their own treatment of the river in its fetid and sinuous course through their midst. At the last meeting of the joint committee it was stated in a report on the sewage works at Davyhulme that nothing had been heard from the corporation since Jan. 28th as to the progress made towards their completion, and it was recommended that the corporation be requested "to furnish the joint committee before the next meeting with a definite statement as to how they intend to deal with the whole sewage of the city." There seems to have been some feeling that Manchester had been treated too leniently, and it was asked why the corporation had not been prosecuted. The answer was that there were two prosecutions pending, one in respect of Gore Brook, Gorton, and the other of Holt Town. The vice-chairman of the joint committee (who for a considerable period has been practically chairman owing to Sir J. F. Hibbert being, till the election, fully occupied with his parliamentary duties) is also chairman of the rivers committee of the city council, which has charge of the sewage of the city, so that he is the occupant of two stools on which it must be difficult to sit comfortably at once, and between which it is possible to slip. He pleaded that the corporation were bound to pay some regard to the ratepayers' pockets, that they had already spent £500,000 on this work, and that "if the land scheme of the corporation were carried out in its integrity it would mean another £100,000 on the debt of Manchester." In the end it was decided to allow two months to the corporation in which to submit their report. The case of the Gore Brook was down for hearing at the City Police-court on the 31st ult., but was adjourned for two months, as plans and estimates were being prepared for the works, "with a view of obtaining borrowing powers and the sanction of the Local Government Board in order to let the contract at once." While these proceedings show activity on the part of the authorities, it is scarcely surprising that they are not popular with some of the manufacturers, and from time to time letters appear protesting against interference with the long-established practice of fouling the streams for the benefit of neighbours lower down. Happily it is not always so, and testimony has often been borne in the committee to the generous and hearty coöperation of many of the manufacturers themselves in the efforts being made to bring back the rivers to a more cleanly and wholesome condition.

THE LANCET.

LONDON: SATURDAY, AUGUST 17, 1895.

OUR columns have again been opened to the discussion of the several questions which arise out of the fact that the prefix of Doctor is both a correct academic appellative and a colloquial method of address. The ambiguous position of the title has bred, as was natural, many ambiguities, so that there are points and half-points without number over which differences of opinion will prevail, and consequent dispute can take place. This is well illustrated by the letters received by us, a typical selection of which have been printed, and we may say at once that we do not intend to deal seriatim with the issues therein raised. We intend to use them as a text for an exposition of our views on the question, premising that these views have been adopted by us more with an eye to courtesy and practical expediency than to cold logic, which can have little part in anything which starts with a flaring ambiguity.

Firstly, there can be no doubt that in all circumstances where medical status has a claim on professional or public attention, in all official connexions—whether exclusively medical or no, and in the social relations of strictly medical circles, only one class of practitioner has a clear and incontrovertible right to the title of Doctor—viz., the Doctors of Medicine of those universities whose doctorates are registrable degrees. It would be strictly logical counsel to advise that only the persons possessing this clear and incontrovertible right should be addressed as Doctor, but as we ourselves, in a medical journal, have decided that such a counsel is too much one of perfection in a world of necessary compromise for us to rigidly follow, we cannot consistently urge the necessity of the strict limitation upon our readers and upon the numerous correspondents who have asked us for a pronouncement. There are undoubtedly cases where the withholding of the title, while strictly correct, constitutes an ungracious act of omission. In the case, for instance, of a man who is registered by the General Medical Council as holding the diplomas of recognised licensing bodies, and who adds to these the doctorate of a university of whose status as a degree-granting institution there can be no doubt, although not registrable—in such a case we consider the frailty of addressing the practitioner as Doctor so venial that we lapse into it as a habit. It will be noticed that the error, though we hope pardonable, brings with it its own risk of punishment, for it might entail at any moment the invidious task of defining the status of a given university. This in some cases would be easy, but in some might require an amount of discrimination that could not be provided for by rules; and then the situation would have to be dealt with by every man according to his private taste. Again, to give a second very obvious example where the withholding of the title of Doctor causes the precisian so doing to assume a somewhat awkwardly exclusive attitude, there is the case of Bachelors of Medicine, whose baccalaureates are held from universities granting a duly registrable doctorate. Should these gentlemen be addressed as Doctor? We ourselves give them the title, knowing that to do so is indefensible logically, but finding that not to do so to *some* would entail serious confusion, and that, as a consequence, not to do so to *all* would have the appearance of a no less serious lack of courtesy. There have been Bachelors of Medicine who have held the highest posts at general hospitals or in the great medical corporations without proceeding to the doctorate. Such Bachelors of Medicine have been, and are still, considered eligible to apply for the staff appointments at public institutions, whose honorary physicians are so universally styled Doctors, and have been styled Doctors for so long a period, that to do otherwise would require, in our eyes, a more practical justification than an attempt, however laudable, after accuracy in terminology. We cannot admit that the question of the comparative difficulty of the examinations of certain of the universities and certain of the corporations affects the procedure. While the period between the securing of the baccalaureate and the advance to the doctorate is unlimited in length by the universities, and while strictly medical circles recognise the Bachelor of Medicine of all the degree-granting universities as a proper competitor against the Doctor of Medicine for medical appointments and awards, so long will it be a task too hard for us to abstain from illogically conferring the title of Doctor upon the Bachelor of Medicine; and we cannot attempt to separate the Bachelors of different universities into groups requiring different treatment, although the gulf placed by some—London University, for instance—between the baccalaureate and the doctorate is a sensible obstacle, while that in others forms no practical impediment.

The position of the diplomates of the several Royal colleges and corporations is so universally recognised (and also, we are pleased to say, so universally acquiesced in by themselves) that it may seem over-explanation of the obvious to refer to it; but there are one or two little points even here that, from the frequency with which they are referred to us for our opinion, would seem to require elucidation. Firstly, such diplomates are not entitled to the style of Doctor however well known to their patients they may be under that style. The diplomate must not arrogate to himself a title conferred upon him colloquially and not gained academically. The profession, knowing well that degrees do not make a man, and the public knowing it almost as well and daily learning to know it better, he will suffer nothing by his abstention; and this we are glad to remember, as undoubtedly there are degrees obtained by many university graduates whose professional attainments are in no way superior to those of the diplomates of the Conjoint Board, and whose preliminary testing has neither been so severe or so thorough as many of their fellow-students to whom circumstances have made the rightful possession of the title of Doctor almost an impossibility. Secondly, the holder of the Licence of the Society of Apothecaries of London is not entitled to be called Doctor; the fact that the Licence constitutes in itself a double qualification not being relevant to the question. Thirdly, the holder of diplomas from any

corporation who happens to be a Doctor of some other faculty than medicine in any university—it makes no difference whether the medical doctorate of the university is recognised by the General Medical Council or not—is not entitled to be addressed as Doctor in medical circles. We cannot, while treating the subject in a general manner, take up all the special points that have been laid before our readers in the recent correspondence. Nor can we furnish a ready-made opinion to fit the many cases that will assuredly be submitted to us in the future as they have been in the past. We have only taken advantage of the fact that as many communications on this ever-green topic have lately been before our readers the subject must be in their minds, and the opportunity for explaining our procedure is therefore advantageous. We do not claim to be, or to have been, strictly logical in this procedure, but we consider that circumstances prevent the strictly logical method of limiting the use of the title from being quite fair or quite convenient.

THE complex conditions of modern working life make the absolute need of a holiday more apparent every year. In all classes of life, from Emperors down to the humblest workers, we do as much in a week as our forefathers were accustomed to do in six months, and the need for recuperation is, therefore, so much the greater, and fortunately the means for supplying this need have grown coincidently with it. The enormous increase in facilities of locomotion which is a notable characteristic of the present day enables even those of moderate means to go far afield; neither can there be any doubt that a complete change of air, scenery, and surroundings is a very powerful factor for good in the treatment of those wearied with work of whatsoever kind. The days are gone when Islington was really "merry" and had fields, when the fisherman could walk to Tottenham and find a clear Lea to exercise his craft upon. There are still left a few places within twenty miles of London which are really country, and not given up to the builder, jerry or otherwise; but the majority of holiday makers go either to the seaside or on the Continent, and it is this kind of holiday that we propose more particularly to consider now.

It may be well asked, "Do those who go for a holiday set about it in the majority of cases in the right way?" and the answer in general is "No." First of all comes the family conclave assembled to decide upon the important question of where to go, which generally ends in the selection of some place favoured by the younger male members of the family. And here we may point out that when people live together all the year round it is the greatest mistake for them to attempt to take a holiday together. The true holiday implies much more than going away from home; it means rest, change of company, being taken out of oneself—this last item is perhaps the most valuable of all. We will suppose, then, that the holiday maker has settled the matter to his or her satisfaction and has started with a friend. Let him beware of the other great mistake so constantly committed—that of trying to do too much. To rush from one town to another; to "do" the Ardennes, Cologne, the Rhine, Nuremburg, perhaps Bayreuth, Styria, and more or less of Italy in six weeks is not a holiday but a penance, and yet there are those who do this and think that thereby they are laying up a store of health for their return to work. The true holiday consists, not in doing nothing, but in having nothing to do—it is the sense of freedom, the feeling that one can go on or stop, whichever is most convenient. Trains and the catching of them, the baleful superstition that "objects of interest" must be visited and inspected, the hurrying from one hotel to another, all these mar the rest which is sought. Then, too, there is the question of climate. We are convinced that the general rule which is followed of going south for the winter—unless, indeed, Egypt or some similar place be selected—is wrong. The countries to go to in winter are those where winter is a reality, and where means are and can be taken to meet it. Russia, Norway, and Sweden are seen at their best in winter, and the beauty of a northern winter night is inconceivable to those who have not seen it, while the dry, windless, cold atmosphere braces every tissue of the body, and if the cold begins to be felt too much the houses are really warm, and warm throughout. Compare this with a shivering day on the Riviera where the art of keeping houses warm is unknown. The same argument will apply to summer. If a warm country is selected the house, the food, and the style of clothing will be found in keeping. In the variable climate with which we are favoured we can neither prepare for winters like the last nor summers like that of 1893; but at least, when we can go to a country blessed with climatic regularity let us visit it at the most favourable time.

The true holiday, then, is not such an easy matter to obtain as it seems at first sight. A congenial companion, a determination not to try to crowd too much into a short space of time, a discriminating selection in the matter of place and distance, and for most places some knowledge of their history, whether political or natural, will go far to make a holiday what it really should be—a complete rest not only for the body, but, what is perhaps more important, for the mind also; and if certain discomforts are met with—and they very generally are—we may remember the words of an old writer: "Nothing would be more tedious than to be glutted with perpetual jollities; were the body tied to one dish always, though of the most exquisite delicacy that it could make choice of, yet after a time it would complain of loathing and satiety. Discontents are sometimes the better part of our life. I know not well which is the more useful; joy I may chuse for pleasure, but adversities are the best for profit. And sometimes these do so far help me as I should without them want much of the joy I have."

THOSE who desire that due instruction in the rules of professional conduct should not be omitted in medical schools will be pleased to read the admirable address on Medical Ethics by Professor GREENFIELD, delivered to the new graduates of the Edinburgh University and published in our present issue. It will well repay perusal by all who wish to guide their conduct on principle and to uphold the reputation of the profession. He makes a point of assuring the young graduates that they are not "mere licentiates of a medical corporation," but members of a university which in the past has been, as he trusts it will be in the future,

distinguished in all branches of learning. The distinction drawn by Professor GREENFIELD is perhaps capable of being considered somewhat invidious, and we have no intention of endeavouring to appraise the relative merits of universities and corporations. There is, however, one point in which the corporations undoubtedly show to advantage in comparison with the universities, and that is in respect of the question of medical conduct. The corporations sometimes administer discipline to their members, even to the measure of excommunication. If the members violate the regulations of a corporation in the matter of professional ethics they are rebuked, and if they do not repent they are deprived of their diplomas and removed from the roll of membership. Most of the universities have no such powers over their graduates, and some of them do not seem to wish to have them. "Once a graduate always a graduate" is their doctrine. Graduates are, according to this view, the only class to whom the punishment of degradation must not be applied Fortunately, the doctrine is breaking down, and some of the universities are, in fact, seeking the powers wherewith to rid themselves of those graduates who act unworthily of their gowns, and to place themselves in this regard on a level with the corporations. We would remind those universities which do not seem too keen to acquire such powers that if they wish the profession and the public to regard their graduates as "more than mere licentiates of corporations" they must act accordingly and be prepared, if necessary, to degrade those whom they have graduated.

We must pass hastily over Professor GREENFIELD'S interesting and just remarks on the happy relations which subsist between the town and University of Edinburgh. It was not perhaps, always so. There was a time when the town council had too much patronage in its hands, though to its honour the professors it chose were often men of the widest renown; but now nothing can be more satisfactory than the pride of the Fathers of the city in the university, and their coöperation with its authorities in maintaining its high prestige. Coming to the main points in the address, we may enumerate them broadly in the following way. Cultivate a high ideal of professional life and its objects; respect the confidences of the profession; consider how to convey truth to patients and their friends; remember that sickness makes a man not himself—"the higher his intelligence the greater his activity, the wider his responsibilities the more intolerable to him is sickness," as involving not so much physical pain as mental, and the suffering of others dependent on him; have patience under such circumstances with peevishness and cultivate calmness, cheerfulness, and sympathy in connexion with clearness, decision, and thoroughness in directions and candour in speech. Like all good moralists, Professor GREENFIELD had to fall back on the Scripture and say, "We that are strong ought to bear the infirmities of the weak," and to quote several other texts from the same indispensable source. While vindicating the perfect freedom of patients to choose their own medical man, he was emphatic in reminding his hearers that "one of the most stringent and primary rules is that no medical man should under any guise, directly or indirectly, interfere with the conduct of a case which is under the care of another unless consulted by him." He denounced all tendency to comment on the treatment and diagnosis of others, insisting that no man can judge of a case he has not seen. At the same time he discouraged all local jealousies and distrusts of professional neighbours. He remarked that he had often been astonished that patients had not enjoyed the advantage of consultation with medical men in their own neighbourhood, and found the explanation in mutual distrust. He enjoined on his hearers the duty of thoroughness in investigating cases, observing most truly that more mistakes are made by want of thoroughness than by ignorance. Finally, he ended with a word of cheer to those who had been backward in class and college distinction, reminding his hearers that it is not always the brilliant students who become distinguished in after-life.

These are thoughtful words and cover more than may appear at first glance. There is a disposition at present to correct the evils of the profession by legislation and by the disciplinary action of the medical authorities. There is need of these; but, after all, the strength of the profession and its place in public estimation will depend on faithfulness to its own traditions, to its great unwritten laws, to its highest morals. Reverence for patients, respect for their feelings as well as for their health, will make us adepts in the investigation and treatment of their cases and in the art of telling them all the truth that can do them good or is consistent with our main duty—that of prolonging their lives. It will make us honourably reticent of all family and personal facts which we come to know professionally. Reverence for professional neighbours will make us charitable in our judgments of them and quick to see in each of them a brother rather than a rival. Reverence for ourselves will make us less discouraged by the vicissitudes of practice and more incapable of all mean methods towards success.

Annotations.

"Ne quid nimis."

SMALL-POX AND THE ROYAL COMMISSION ON VACCINATION.

THE existing prevalence of small-pox in the metropolis acquires additional importance, not only because it has appeared at a time of the year when small-pox is, as a rule, least likely to become epidemic, but because at no time within the present generation has there been so much tendency to disregard the law as to vaccination. This latter condition of affairs has been brought about by the extraordinary delay in the issue of the report of the Royal Commission on Vaccination which was appointed in August, 1889. We do not doubt that the preparation of all the evidence which has been brought before the Commission, both by witnesses and by subcommissioners of their own appointing, must take a considerable time, but it is absolutely impossible that the minds of the Commissioners should not be made up as to the various points which were submitted to them when they were appointed; and we see no reason why Parliament should not request the report forthwith, leaving the question of evidence to stand over, as was done in the case of the Royal Commission on Tuberculosis. In one

sense, Parliament may not have the authority to make such a demand to a Royal Commission, but Her Majesty's Ministers can make it; and having regard to the present position of affairs the strongest possible pressure should be put upon the Commission to hand in their report before they scatter for their holidays. Even after it has been received there will be quite sufficient delay in determining as to the administrative and other details for giving effect to any recommendations they may make as to alterations in the law or in the methods of performing vaccination. But what the public now want is an authoritative statement as to whether vaccination does or does not afford a protection against small-pox and whether the operation ought to be adopted and carried out with a view to such protection. We can conceive of no reason for delay in making such a statement; and it is the more imperative that an announcement as to this should now be made, since boards of guardians are constantly declaring that they are awaiting it before deciding whether to enforce the provisions of the Vaccination Acts or not. And in the meantime a population is growing up which is not vaccinated, and small-pox is spreading in our midst. We regard the immediate position of affairs as involving much gravity. If small-pox gets a hold on London before autumn it will be a very serious matter both for London and for the provinces; for anything like an epidemic in London has almost always been succeeded by the extension of the disease into provincial towns and districts. Whilst, therefore, we are quite ready to acknowledge the extent of the task which the Royal Commission have had to perform, we cannot refrain from pointing out, first, that they have had ample time to come to a decision on the material laid before them; and, secondly, that the present emergency is one that admits of no further delay in letting the public know what conclusions they have arrived at on the principal matters submitted to them.

SUGGESTION AND CRIME.

A RECENT murder in England elicited, on the trial of its perpetrators, a solemn admonition addressed by the Court to the purveyors of juvenile literature in which the robber and the assassin are presented in an attractive rather than deterrent light. The jury, indeed, saw a distinct nexus between the perusal of such literature and the crime of the young prisoners in the dock. Their finding has been much quoted abroad, more than one Continental journal approving of its tenour and recommending a similar admonition on the part of tribunals sitting in judgment on delinquents of tender years. In Switzerland the Société des Médecins et Pharmaciens of Berne, at a recent sitting on the prevalence of self-murder, came unanimously to the following decision: "For twenty years the average of suicides in Switzerland has been 650, a proportion exceeded only in Saxony and Denmark. It has, besides, been matter of common observation in our great cities, at longer or shorter intervals, that a certain number of suicides succeed each other *coup sur coup*—suicides in which the first case often acts by way of suggestion, inciting individuals predisposed to commit the same desperate act. It is therefore to be desired that in future the daily press should refrain from reporting cases of suicide. This resolution will be brought under the cognisance of the Swiss Press Association." One of the leading organs of the Confederation, the *Journal de Genève*, comments favourably on this resolution of its medical *confrères*, and, with perfect justice, we believe, claims credit to itself for having studiously and steadily excluded from its *chronique* all cases of suicide committed within the canton. The policy thus recommended and acted upon has its warrant not only from experience, but even *a priori* from the study of psychology. The mimetic principle in man, particularly in those developments in which evolution sees a distinct retrogression to a lower, more animal type, has its roots deep down in the organisation, mental as well as physical, arguing a pithecoid strain which only awaits certain favouring conditions to manifest itself unmistakably in character. The epidemic of suicide which has been so much remarked of late has had its counterpart in the epidemics of murder or manslaughter so apt to culminate in great social upheavals like that of the French Revolution or of the Parisian Commune in 1871. Lethal violence on both occasions was "in the air," and what Zola calls the "homme-bête" became a ready imitator of "what the rest were doing," in other words, a "mission of massacre." We have small belief that such admonitions as those of British tribunals or foreign professional associations will have much practical force on contemporary crime, favoured as it notoriously is by fanatical estimates of the worthlessness of human life almost openly avowed. But neither law nor medicine need be deterred from throwing its influence into the scale of social and mental sanity by the dread of having its "opinions" set down as merely "pious" or relegated to the limbo of the "academic."

INDIAN PILGRIMS AND CHOLERA.

A BILL was introduced by Sir Alexander Mackenzie at a meeting of the Supreme Legislative Council of India on the 11th of last month for the regulation of pilgrim ships. The Bill is in the main the outcome of the recommendations of the Paris cholera conference of last year, and the new regulations will be put in force before the next pilgrim season. The Government of India has in this matter acted out of deference to public opinion and has done its best to meet the recommendations of the conference, and we understand that it may confidently anticipate the reception of strong representations from the Mahomedan community in India as to the serious increase of the cost of pilgrimage which will be entailed by some of the provisions contained in this new Pilgrim Ships Bill. We think that the Government of India is therefore in a position to demand that something should now be done by the Ottoman authorities on their part in regard to Kameran and the proper protection of the pilgrims at that place. The *Times of India*, in a recent article on Kameran and the Pilgrim Traffic, alleges that while, on the one hand, little or no evidence can be adduced in support of the theory that cholera epidemics at Kameran and the Holy Cities have been originated by sea-borne pilgrims importing the disease from India, there is ample evidence, on the other hand, that the enforced detention of the pilgrims on that island has the most injurious effects on their health, and that Kameran is itself a cholera-infected depôt and a sort of hotbed for the development of that disease, whether we regard it as endemic at that station or as an importation from India. Our Indian contemporary gives a full topographical description of the island of Kameran, of the lazaretto with its seven quarantine camps, of the so-called sanitary arrangements, and of the disinfection and other methods of procedure pursued in connexion with the unhappy pilgrims during their enforced detention there, and declares that the whole quarantine process is a delusion and that no precautions whatever are taken as regards the pilgrims' water and food supplies. The importance of the question is as great to India as it is to Europe. Thousands of pilgrims make a long and perilous journey at a heavy cost and great sacrifice to themselves for religious considerations which are to them of an imperative kind. If they do not actually die from cholera contracted at Kameran they are liable to be sent back to India in an enfeebled state of health after an enforced and long detention, with their mission unfulfilled and their means exhausted. We quite concur with the

Times of India in thinking that common humanity, as well as the safety of Europe, demands that England should take up this question, and that the British Government should adopt some definite line of action in regard to it. Kameran is, in its present condition at any rate, an unfit place for a quarantine station; there should be an International Board of Health in the place of the present ineffective Ottoman Board, and in justice to our Indian Mussulman subjects and in return for the efforts which the Indian Government has made to meet the wishes of the Paris conference the treatment accorded to the Hajis from India at Kameran, Jeddah, and in the Arabian desert requires to be thoroughly investigated and reformed. It is as important in its way as the question of Armenia, and it may be urged upon the Sultan on the ground of protecting and safeguarding himself and his subjects in Constantinople and Turkey from epidemic cholera, about which he is known to be keenly interested.

AN ALLEGED CASE OF POISONING BY ARSENIC AT SYDNEY.

A TRIAL that is probably unique in the history of legal procedure has just been concluded in Sydney, and the case presented not only features which have aroused the most intense public interest, but also points of medico-legal importance. The evidence given has been most voluminous, and in many points is contradictory. It would be impossible to summarise it all, but briefly the main facts appear to be these. Early in March last a man named George Dean was accused at the North Shore Police-court, Sydney, of attempting to poison his wife. He was committed for trial, and the case was heard at the Central Criminal Court by Mr. Justice Windeyer and a jury in the beginning of April. The jury took some time to consider their verdict, and the judge told them there could be no doubt about the guilt of the prisoner. The jury then returned a verdict of Guilty, with a strong recommendation to mercy. The judge pronounced sentence of death. Popular feeling was roused in favour of the prisoner, public meetings were held, and the sentence was appealed against and commuted to imprisonment for life. The agitation in favour of the prisoner continued, and a petition was presented to Parliament for the appointment of a Royal Commission to make full inquiry into the case. The Government then appointed a Royal Commission, consisting of Mr. F. E. Rogers, Q.C. (chairman), Dr. F. N. Manning, and Dr. P. Sydney Jones. From the evidence given at the trials and before the Commission it would appear that a few days after her confinement Mrs. Dean complained of restlessness and sleeplessness due to neuralgia. Her medical attendant, Mr. Newmarch, prescribed a morphine mixture. She was then attacked with vomiting, which he attributed to the medicine. This was in the first week of January. On March 4th, when he saw her again, she was suffering from vomiting and purging. Her temperature was subnormal. He attributed the attack to something she had eaten. The same evening a bottle containing some lemon syrup was brought to him in a mysterious fashion, and he was asked to get it analysed. It was then suggested that Dean was poisoning his wife. The syrup was analysed and found to contain 1¼ grains of arsenic and 1½ grains of strychnine. On March 10th Mr. Newmarch cut a fæcal stain out of Mrs. Dean's night-dress and had it analysed. It contained traces of arsenic. During and subsequently to the trial at the Criminal Court Mrs. Dean developed peripheral neuritis. No satisfactory evidence was given as to where the poison was obtained or to connect any person with its purchase, and the only evidence to connect Dean with the poisoning was that of his wife and her mother, to the effect that they had seen him mix a powder with some of the medicine, and that he prepared and gave her all her food and medicine, and that tea and groats and other articles of food given her by Dean had a bitter taste. Mr. Newmarch and the medical men who subsequently attended Mrs. Dean at the hospital had no doubt that she had suffered from arsenical poisoning, though the defence suggested that the symptoms might have been due to influenza. A great deal of medical evidence was given on this question and as to the effects of arsenic, and especially as to the effects of arsenic combined with strychnine, and statements were made that the two drugs were antidotal to each other. Dean had previously borne an exemplary character, but evidence was given to the Commission that in his youth he had been in gaol. Evidence was also given that Mrs. Seymour (Mrs. Dean's mother) had been a notoriously bad character, had kept a shop which was practically a house of ill fame, and had been the associate of criminals. The main defence was that there was no evidence to show that Dean poisoned his wife except that of his wife and mother-in-law, and that there was a conspiracy on the part of the mother and daughter to accuse Dean of the crime and so get rid of him. The Commission was not unanimous in its report. Mr. Rogers, the only legal member, upheld the decision of the jury and the opinion of Judge Windeyer that Dean's guilt was not open to question. The two medical members reported that there was doubt whether he administered the poison and recommended that he be released, and released he has been accordingly. We are not aware of any previous occasion upon which the decision of legal authorities on matters of evidence has been reversed on the recommendation of medical men.

THE ALLEGED INCREASE OF INSANITY.

IT is eminently satisfactory that the Lunacy Commissioners are beginning to recognise the importance of age incidence in the consideration of the statistics of insanity with a view to the determination of the problem whether the constant increase in the number of the insane under treatment in England and Wales really signifies an increasing prevalence of lunacy, or rather of occurring cases of insanity. In their recent annual reports it is true that the Commissioners have constantly expressed their opinion that the large increase in the number of known lunatics is mainly due to causes other than an increase in the prevalence of insanity as an active disease. They have, however, until now turned a deaf ear to the urgent appeal for statistics of the ages of the patients annually admitted to the lunatic asylums, and of the ages of the patients who die year by year in those asylums. We are glad to note in the recently issued report a first instalment of such age statistics, which, if continued for a series of years, and if amplified, will in a few years afford the means for throwing much light upon this important and interesting problem. It is pointed out that in recent years there has been a marked increase in the number and proportion of admitted cases of "mental decay resulting solely from old age." In proof of this the Commissioners show that in 1883 the admissions to asylums of persons aged upwards of sixty years were equal to 12·5 per cent. of the total admissions; in 1888 this proportion had increased to 13·2 per cent.; and in 1893 it had further increased to 14·7 per cent. These statistics are based upon information contained in the annual reports issued by county and borough asylums, and conclusively prove that the cases admitted above the age of sixty years have increased at a far more rapid rate than the admissions under that age. These cases represent, probably, to a large extent transfers from workhouses to asylums, but from whatever cause the increase arises it can scarcely be seriously asserted that this increase of cases of senile mental decay represents an increase of true insanity. These figures, moreover, throw some light

upon the age incidence of the persons returned in England and Wales as mentally deranged at the three Censuses in 1871, 1881, and 1891. The ratio per 1000 of the English population returned as mentally deranged under the age of forty-five years was 2·24 in 1871, 2·29 in 1881, and 2·26 in 1891. Thus the ratio of insanity to population at these ages remained practically stationary during this period of twenty years. Above the age of forty-five years, however, the calculation of the ratio of insanity gives very different results; the ratio was 6·35 per 1000 in 1871, 7·40 in 1881, and 8·02 in 1891. In the absence of information as to the ages of cases admitted to asylums it was impossible to ascertain how much of this increased incidence of mental derangement upon elderly persons was due to what may correctly be called the accumulation of cases caused by improved treatment of the insane in asylums, and how much to an increase in the number of admissions of cases of senile dementia. The figures given in the Lunacy Commissioners' last report established beyond doubt the steady increase, both actual and relative, in the admission of cases of so-called insanity above the age of sixty years. The important bearing of these figures in the direction of disproving the reality of the alleged increase of insanity in this country will, it may be hoped, induce the Commissioners to give more complete statistics of the ages of the annual admissions to all asylums for the insane in future reports.

ABDOMINAL SECTION FOR PUERPERAL SEPTICÆMIA.

THE July number of the *American Journal of Obstetrics* contains an interesting communication by Dr. J. M. Baldy on Abdominal Section in Certain Cases of Puerperal Septicæmia. He distinguishes between cases in which there is suppuration and cases where there is infection of the Fallopian tube, the ovary, and possibly of the peritoneum without any formation of pus, but with exudation recognisable by physical examination. A case is given as an example of the former class in which a patient was very ill after delivery for several weeks, the uterus was subinvoluted, and to the left side of it could be felt a large, boggy mass firmly adherent, tortuous, and tender. An abdominal section was performed, and the swelling, which proved to be the left Fallopian tube and ovary distended with pus, was removed, the patient making a rapid recovery. So far there is nothing remarkable in Dr. Baldy's paper. It is well known that ovarian tumours, which may or may not be suppurating, are frequently noticed for the first time during the lying-in period owing to the size of the abdomen remaining greater than is normal after delivery, and the proper line of treatment for such tumours within a few weeks of delivery is the same as at other times. In the second group of cases, where there is no pus, though exudation can be felt and the patient is acutely ill, Dr. Baldy admits that it is clinically a most difficult matter to decide whether or not pus is present, but if the opinion be come to that there is no pus then no operation is indicated. In cases of general purulent peritonitis, from any cause whatever, Dr. Baldy does not believe that any line of treatment, operative or other, has ever saved the patient; but, inasmuch as a diagnosis of general peritonitis may sometimes be made when really the peritonitis is more or less localised, in doubtful cases Dr. Baldy advises operation. Turning then to the cases of puerperal septicæmia grouped as pelvic cellulitis, the question again arises as to whether there is or is not pus. Where there is not pus then as a general rule no abdominal section is likely to be required; where, however, there is pus, although it is admitted that the whole extent of infected and suppurating connective tissue cannot be removed, Dr. Baldy advises total hysterectomy, not only on account of the amount of diseased tissue so removed, but because the affected area is so thoroughly opened up by the operation, and placed in a favourable condition for drainage. So far the cases under consideration have been those of puerperal septicæmia where there is a definite swelling to be felt that may be due to either suppurating cellulitis, or to salpingitis and peritonitis, with accumulation of pus in the Fallopian tubes or ovaries. There is, however, a group of cases of puerperal fever where no swelling is to be felt in the pelvis and where absorption is taking place from the interior of the uterus itself. In this group, after trying intra-uterine douching, curetting, the application of pure carbolic acid, packing with iodoform gauze, and the like, without improvement soon appearing, Dr. Baldy also recommends abdominal hysterectomy, though here he thinks removal of the uterus as low as the internal os sufficient. He has collected nineteen cases of hysterectomy during the puerperal state performed by American operators. Twelve of the patients died and seven recovered. Dr. Baldy thinks sufficient success has been obtained to warrant a further and more general trial of abdominal hysterectomy in the special class of cases under consideration, though he admits the field for hysterectomy in puerperal cases is not a large one.

PRESCRIBING DRUGGISTS.

THE prescribing druggist is like the poor for whom he prescribes, always with us, but the latest instance reported exhibits some "features of interest" rather different to the usual run of these cases. A child named Clark, suffering from bronchitis after measles, was attended by the druggist, who gave it some harmless powder. As the child did not get better he told them to send for a medical man, which they did, but the child died. Mr. Perdue, the druggist in question, said he had attended the sick, the dying, and the bereaved for six years. He never got any fees, but he added: "I get my living by converting tea-leaves into anything. It would surprise anyone to see what I make out of tea-leaves." Mr. Perdue is evidently well within sight of the philosopher's stone. We only trust that tea is not among the things that he converts tea-leaves into, for in certain parts of London a large trade is, we believe, done in tea-leaves. They are rolled, dried, faced, and sold as fresh tea. However, this trade is less harmful than Mr. Perdue's by-occupation of prescribing, although, as the coroner said, "Anyone may prescribe at their own risk."

SUICIDE IN ITS MEDICAL AND ITS MORAL ASPECTS.

IT has been noted elsewhere that a tendency to suicide has recently been somewhat unusually prevalent. In THE LANCET of July 28th, 1894, we suggested that this tendency might be capable of partial explanation on physical grounds, and in a later issue (Aug. 11th) we published a letter by Dr. Alexander Haig bearing upon the same subject. The regular, though happily never frequent, connexion between solar heat and this form of crime has been repeatedly observed, and may, without undue straining of logical conditions, be accepted, at all events as far as it goes, as a working hypothesis founded on accurate observation. When we go further and seek to explain the hypothesis itself, however, we are still conscious of the insufficiency of our data. The theory by which Dr. Haig would associate mental depression with blood vascular tension due to uric acid is indeed helpful in its measure, as it is certainly ingenious. The measure of assistance towards a sufficient explanation is nevertheless in both cases very meagre. It is evident that in the case of most persons a wide desert of despondency intervenes between the state of mind which

corresponds to a hard pulse and overladen tissues and the last fatal folly of despair. Save in the case of insane or weak-minded persons, it is hardly possible to conceive that men can be impelled to suicide by purely physical conditions, which are, after all, so common as hardly to be regarded as abnormal except by the scientifically educated mind. We would by no means overlook the necessity of treating these cases by appropriate means, but we are none the less assured that the reckless will which induces men to convert a weariness of life into a purpose of self-destruction does not depend upon mere atmosphere or mal-excretion. Where they are free to operate, the reserves of moral sense, thought, and resolution have either been previously exhausted or have not been drawn upon. A feeling of personal loss or a morbid fear of such has obliterated the sense of human relationship. The interest of dependent or associated neighbours and of relatives is forgotten. Self-love, not social duty, is the impelling force. We have not much hope that persons in this mood will be greatly influenced by changes of weather or by purely physical treatment. We would rely more upon the full and frank assertion of the duty and utility of all human beings to each other and to the Providence essentially friendly to men which called them into being. Suicide is, after all, a moral failure, an evidence of the mastery of mistrust, an act of rebellion against the authority of patience. Obviously no drug, no social reform even, can effectually cure it, unless they be aided in the first place by a frank and full recognition of man's moral relation and responsibility.

THE CASE OF SURGEON LEA, R.N.

IT will be remembered that in an annotation in THE LANCET of June 22nd last we referred to the case of Surgeon Lea, R.N., and said that, considering his hitherto unblemished reputation, and the very unsatisfactory and incomplete nature of the evidence adduced at the court-martial held on this officer at Sydney in April last, we were decidedly of opinion that the matter called for further careful investigation by the Admiralty in this country. We are glad to learn that Surgeon Lea's case is under the consideration of the Lords of the Admiralty and the legal advisers of the Crown. The circumstances were of an altogether exceptional and curious character, and as far as we could judge from the published reports of the court-martial it seemed to us that Surgeon Lea had been hardly dealt with. We consequently await the result of the decision that will be, or has already been, arrived at with much curiosity and interest. Surgeon Lea was a distinguished student of University College Hospital, and a former pupil of the present President of the Royal College of Surgeons of England. He entered the Naval Medical Service in August, 1883, taking the first place, and has consequently twelve years' service.

FOR THE SILLY SEASON.

THE sea serpent has at last been caught, or rather cast ashore and photographed, but though associated with wild legends there has never been any reasonable doubt as to his existence. But there is a wilder form of credulity which comes up every year in the shape of stories of people who "bring up" live animals, and the following instance appears in the columns of the *Star*, which must be either extremely credulous or have a painful disregard for the truth. The story comes from Silvertown—"Ex oriente semper aliquid novi." Such stories as these always come from the East-end, and the present one is to the following effect. A lady in Silvertown had suffered from spasms, diarrhœa, and sickness for some time. Two medical men and a hospital were tried in vain. She then consulted another medical man, who, with a rapidity of diagnosis which does him infinite credit, said "By Jove, it's a worm," and proceeded to administer quinine and nitric acid. After three days of this treatment, during which the patient endured much suffering, she felt something rise in her throat, and, putting her finger and thumb down her throat, pulled off the head of a newt, which was followed a few moments later by the body and tail, eight inches in all. According to the *Star*, the medical man's explanation is that it was swallowed either in water or watercress, and the process of getting rid of it was as follows: "The acid in the quinine irritated the animal, causing it to jump about and tickle the bronchial tubes. The tickling produced the vomiting, and the vomiting produced the eft." We must confess to serious doubts as to the truth of this story. A newt eight inches long is almost unknown in England, and we think it may well be classed with the story of the bees or wasps which were vomited by a harvester in Wales some short time ago, and upon which we commented in these columns. But nothing will ever induce a certain class of patient to disbelieve in the existence of living animals inside them.

THE DIFFUSION OF SMALL-POX.

THE epidemic manifestation of small-pox through which London is at the present time passing would seem to have reached its highest point for the moment. The cases newly arising in the fourth week of July were 98 in number, and though this number gave place to 90 in the succeeding seven days the attacks coming to light last week were but little over 50, the registered deaths in the successive weeks being 1, 1, and last week 3. As might have been expected, the patients for whom the Metropolitan Asylums Board found they had to provide rapidly increased, and in the four weeks ended last Saturday were respectively 23, 115, 60, and 54; whilst the cases remaining under treatment in their hospitals and at Highgate Small-pox Hospital rose from 89 to 199 in one week, and thence to 237, and last Saturday to 273. At the last meeting of the Asylums Board the fact came out that, whereas the earlier cases were in the main from shelters and the like, the later manifestations were largely from among the resident population, a sign of deep significance as tending to show that the disease had fastened on the portion of the community permanently located in London. In these circumstances Gore Farm Hospital was cleared of its scarlet fever patients and reserved wholly for convalescent small-pox cases. The application of West Ham to be allowed to make use of the Board's accommodation was heard, and regret was expressed that the means at the disposal of the Board did not admit of its being granted. But very fortunately the disease has not made any great inroads on that borough yet, the cases in recent weeks being few in number. The deaths registered in the metropolis last week as occurring from small-pox were 2 in vaccinated adults aged over twenty years and 1 in an unvaccinated person of the like age period. Two belonged to Whitechapel and 1 to Shoreditch sanitary areas. Districts contributing cases to the hospital ships last week and during the present week were, among others, Whitechapel, Mile End, Plumstead, Lambeth, Wandsworth, Paddington, St. George's Southwark, and St. George's-in-the-East, the western and northern areas being generally free from the disease. In the home county of Essex there were, in addition to the few cases at West Ham and Leyton, some attacks at Leigh, not far from Rochford. In the Midlands there is but little to chronicle, one or two places in Staffordshire and Derbyshire being slightly affected; but westward the Salop County Council have had before them the history of an outbreak of a localised character at Oswestry, traceable to a case found at a common lodging-house,

Subsequently 5 other persons residing in the same house were found to be suffering from the disease, as was an innkeeper's wife, infected probably by the original case, the patient having conversed with her in the inn. Measures of disinfection have been taken, and persons likely to have been in danger of infection have been kept under observation. In the last week of July there were 4 cases heard of from Manchester, 3 from Openshaw and 1 from Hulme, all being removed to the Clayton Hospital; and last week 2 other cases were reported in the city. A death from the disease was last week registered at Liverpool, and 2 deaths at Oldham, where the disease is again on the increase, several cases having occurred there and in the adjacent township of Chadderton. The outbreak at Thornhill is causing more anxiety, some alarm having been created by the rapid succession of 4 deaths, and temporary hospital accommodation has been decided upon, as well as the expenditure of £3000 on a permanent structure. Much discontent has been felt at the alleged discharge from the Southport Convalescent Home of a man who was found to be suffering from small-pox. A family of six members has been moved from Stainland, near Halifax, to the Hollins Hey Hospital, and a case has been recorded at the village of Mytholmroyd. In Dublin the news for the week ended Aug. 3rd is to the effect that only 6 cases of small-pox were admitted to hospital, against 15 discharges, leaving only 25 acute cases under treatment, as compared with 36 in the preceding week. Of 3 deaths registered in the week the patients were registered as vaccinated, unvaccinated, and "doubtful as to vaccination." The former and latter were in adult life; the unvaccinated person was aged between five and twenty years.

MALINGERING AND MIRACLES.

A CASE has just been heard at the Paris Assizes which is extremely interesting to the physician, the theologian, and the criminologist. It is that of a man who for some five years or more deceived the greatest physicians in Paris, including Charcot, into believing that he had commencing locomotor ataxy. After having been cauterised and "suspended," neither of which treatments he liked, he eventually arrived at Lourdes, where he was miraculously "cured." In 1891 he robbed the Lourdes fathers of 400 francs, and returning to Paris was admitted to an asylum as suffering from persecution mania, and from this institution he stole some 2000 francs. Being arrested, it was discovered that he was a malingerer of "astounding skill," and was sentenced to four years' imprisonment and ten years' police surveillance. The whole question of modern miracles is an exceedingly difficult one. We should be the last to maintain that they cannot happen, but whether they do is, we believe, queried by Roman Catholic theologians as well as by others. This case of locomotor ataxy may be catalogued along with those which are cured by a certain patent medicine—i.e., the disease never existed; but in this age of unbelief it is a pity when anything occurs to sap the religious element in man. These kind of failures react in a very harmful way upon the hysterical paraplegics who are really ill, if only functionally, and who, if they can only be induced to believe they will be cured, are so, at Lourdes or any other place which has the requisite mystical qualities.

MEDICAL SERVICE OFFICERS AND THE MEDICAL REGISTER.

WE think that Brigade-Surgeon-Lieutenant-Colonel Temple Wright has done a good service to members of the medical departments of the army and navy by calling attention to a subject about which he recently moved a resolution at a general meeting of members of the British Medical Association. The resolution, which was unanimously passed and will be forwarded to the President of the General Medical Council, was this:—

"That this meeting desires to submit a respectful suggestion to the General Medical Council that every medical officer whose name appears in the *Navy List*, the *Army List*, and the *Indian Army List* shall be considered to be still alive and at the post opposite his name."

From the nature of their duties and their conditions of life medical officers of the respective services, unlike civilians, have no fixed place of abode, and are more or less wanderers. It must consequently happen that letters sent to their supposed addresses sometimes fail to reach them, and when this occurs they may find, to their astonishment and possible grave inconvenience, that their names have been struck off the Register under the mistaken assumption, for example, that they are dead. The appearance of their names in the army and navy lists is an official guarantee, however, of their being alive, if not actually present at their respective posts, and may be safely relied upon as correct. Sir Richard Quain had recognised the thoroughly reasonable nature of the representation, and suggested that it should be embodied in a resolution and submitted to the General Medical Council by the British Medical Association, as he very rightly considered that it would materially facilitate the conduct of official business by the Council, of which he is the President. This has accordingly now been done, and Brigade-Surgeon-Lieutenant-Colonel Temple Wright may be fairly congratulated on the practical nature of the step he has taken in the matter.

AN EXHIBITION OF DRUGS AND CHEMICAL PRODUCTS.

PHARMACEUTICAL and practical chemists in general will find interesting material for their inspection at the Drug, Chemical, and Allied Trades Exhibition which is to be held at the Royal Agricultural Hall, Islington, on Sept. 10th, 11th, 12th, and 13th. Whatever may be the pecuniary results of these displays they are undoubtedly most useful in the spreading of correct information with respect to the various articles and processes on view. The experimental chemist is incessantly placing new substances at the disposal of the prescriber, many of whose familiar present-day medicaments were altogether unknown twenty years ago, and pharmacists have not been slack in devising convenient and palatable preparations. The offices of the exhibition are at 42, Bishopsgate-without, E.C.

THE DIAGNOSIS OF SMALL-POX.

A PHYSICIAN with exceptional experience of small-pox and of the common errors of diagnosis in reference to it can do no kinder thing than to give his brethren the benefit of his observation. This is more especially true at a time when the much-dreaded disease threatens to resume activity. The abeyance of the disease for years all over the country, and especially in the metropolis, makes such a communication still more valuable. The growing efficiency of sanitary police checks the spread of small-pox more and more, and makes it possible for many students and even practitioners of medicine never to have seen a case. The effect of vaccination in modifying the disease when it does occur is such as to make an actual case often differ much from the typical case described in books. Under all these circumstances the shrewdest practitioner will be most grateful for a few points of guidance in diagnosis where it is so serious to be wrong and so important to be right. We would direct all that are so minded to a communication in THE LANCET of July 20th by Dr. H. Meredith Richards, medical superintendent of the City Hospitals, Birmingham, whose lot it has been to see not only the 3000 cases sent to the hospitals, but to

visit on behalf of the medical officer of health every case notified as "possible small-pox." The points of diagnosis are given with admirable clearness, and not only without any of the airs of superior knowledge, but with ample recognition of the difficulties of the duty and frank admission of the care with which it is generally discharged.

INTERCOLONIAL MEDICAL CONGRESS OF AUSTRALASIA.

WE have received a notice from the secretaries that the date of this Congress has been altered from Feb. 17th to Feb. 3rd, 1896. Another alteration has been made in the arrangements as originally announced in our columns[1] in the formation of a subsection of the Section of Surgery to consider diseases of the eye, ear, and throat. The secretary for this Section is Mr. H. L. Ferguson, High-street, Dunedin. The names of the other secretaries of Sections will be found in our former notice.

THE HONOURS TO THE STAFF OF THE SHAHZADA.

WE note in the daily press that Lieutenant-Colonel A. C. Talbot, C.I.E., has been promoted to the Knight-Commandership of the Indian Empire, and Mr. Thomas Acquin Martin, the Agent to the Government of Afghanistan, has received the honour of knighthood, in recognition of their services during the visit of the Amir's son to England. We cannot but think that the extension of some similar honour to another member of the Shahzada's staff, who is an officer of the Indian Medical Service, would have been appreciated by the medical profession, whose labours on such occasions are too often forgotten. Dr. Leahy must have had to bear the weight of very serious responsibility during the protracted visit of the Prince, and the omission of his name from the list of honours strikes us as an unfortunate and regrettable incident.

AT a meeting of the Strand Board of Guardians held on Tuesday, 13th inst., a resolution was adopted in favour of placing the Salvation Army shelters and all similar institutions under the Common Lodging-house Act, having in view the spread of small-pox and other infectious diseases from these shelters.

SIR E. J. REED has again written to the *Times* expressing a hope that the new Government may see their way to release Dr. Cornelius Herz from the condition of arrest in which he has been for the last two and a half years. The accounts of Dr. Herz's health remain very gloomy.

SOCIETY OF MEDICAL PHONOGRAPHERS.

THE first general meeting of the members of this society was held on July 30th at 20, Hanover-square, London, when there was a very fair attendance of members and visitors, the latter including Sir Henry Howorth, M.P., F.R.S., and Sir William Broadbent. The chair was occupied by Dr. GOWERS, F.R.S., first president and founder, who was supported by Dr. Gray (Oxford), Treasurer, and Dr. Neil, Secretary.

Dr. GOWERS, in his address, stated that the object of the society was to promote the work of their profession, alike in medical science and its application in practice, by freeing it from one grave hindrance which the present has inherited from the past. Writing to-day is what it was when Caxton made it mechanical, with no attempt at improvement until the present generation. But now a method of writing is available in which simplicity of symbol corresponds to simplicity of sound, and which needs, with a greater average of legibility, only one-third of the time and less than one-third of the labour of ordinary writing. Science rests on observation, which without immediate record is of little value; not only is memory inadequate, but record at once reveals unsuspected imperfections in observation. Compared with longhand, shorthand permits in a given time twice the amount of record, while leaving twice the time for observation. The latter must be more minute and more precise to permit the fuller record, and the first effect of the use of shorthand is on the quality of work. The constant use reacts on the worker, and it is again found true that "writing maketh an exact man." In the daily work of the practitioner, which is peculiar in being a form of personal science—knowledge constantly increased by observation—record is most important. It changes vague impression into definite knowledge and increases that ability which is so important to those who suffer. For most practitioners record is practically impossible with longhand; it is possible for all with shorthand. The service of this, however small its influence may be thought, multiplied by numbers, becomes incontestably important. The chief means adopted by the society is the issue of medical literature in lithographed phonetic shorthand—a monthly periodical and other publications. But the facility of writing, and secure legibility, which phonography affords, have led to useful interchange of thought in other ways. The society, started last December, has now 165 members, of whom 25 are students and 140 practitioners. It is important that the student should be familiar with shorthand before beginning professional studies, for it helps him in every form of work. It is much to be desired that shorthand should be made an extra subject in the entrance examination. It needs but a limited and short expenditure of time, and this is soon regained. It can, however, be quickly acquired at any age. It is now taught at many schools, but its subsequent use is not sufficiently encouraged. It may seem strange that the value of this mode of simple writing—quick, easy, and secure—should first be thus recognised by members of the medical profession, but it is noteworthy that, in their hands, its use will probably have most direct influence on the welfare of others.

A letter was read from General Sir C. WILSON, speaking of the recognised value of shorthand to staff officers, and one from Dr. J. H. GLADSTONE, who has used shorthand constantly in science since 1846, and invariably employs it for recording observations and preliminary writing.

The Bishop of HEREFORD wrote: "The establishment of this Society of Medical Phonographers is an event of no small importance. It is obvious that it puts a new instrument into the hands of the observer, an instrument which must be specially valuable when you have to deal with subtle and quickly changing phenomena. I may say how important your action seems to me because of its influence as an example. It will do a great deal to popularise the study in all our higher schools, as it will help to brush away the prejudice that shorthand is chiefly useful for trade purposes and may be neglected by the profession without loss."

Sir HENRY HOWORTH, M.P., F.R.S., in responding to the President's invitation, said he was distinctly one of that class who deplored most desperately that he was not taught shorthand as a boy. In writing his books his great despair and difficulty had been the copying down *verbatim* in the ordinary longhand the material pertinent to the subject. Shorthand would have spared his eyes and saved both time and temper. He felt so strongly on the matter that he was insisting on his boys learning the art. He had travelled in dangerous and difficult countries, where he found one of the greatest difficulties was our cumbrous writing. He referred to the great use made of the art by the President in the compilation of his published works, and went on to speak of the value of the phonetic principle, which had enabled Mr. Reed, at the sittings of the Opium Commission in India last year, to accurately record and afterwards read over the evidence of two Brahmins of whose language he knew nothing and whom he had never seen before. In conclusion he referred to the President as a great evangelist in the cause, and spoke in flattering terms of the *Phonographic Quarterly Review*.

Sir WILLIAM BROADBENT said he was present to testify to his sympathy with the work of the society, and that he agreed with every word of the presidential address. He, also, had to look back with regret to the fact that he did not persevere sufficiently with shorthand to make use of it, but he recognised to the full the utility of the art for taking

[1] THE LANCET, vol. ii., 1894, p. 1115.

notes at the bedside. In some cases circumstances prevented the immediate record in ordinary longhand, and when notes were postponed they lost in vividness and accuracy. He looked forward to the time when it would be the rule that all men who seriously worked in the cause of hospitals would make use of such a great advantage. He wished the society success and felt sure it would be extremely useful to the medical profession.

Mr. THOMSON (Dublin), an old shorthand writer, spoke highly of the value of the art in his work and thought the sphere of the society would be extended from day to day. He did not agree that there was an age beyond which shorthand could not be learned, and felt sure that if the last speaker would give a daily hour to the study for a few weeks he would write it with sufficient facility to employ it in private cases.

The PRESIDENT stated that Dr. Landon of Cincinnati, who was forty-five years of age, obtained in a fortnight sufficient power to write a letter which he (Dr. Gowers) could read as swiftly as he could speak.

THE ASSASSINATION OF M. STAMBOULOFF.

WE are enabled, through the courtesy of a medical correspondent at Sofia, to present our readers with some sketches which will enable them to realise the terrible nature of the wounds inflicted upon the late M. Stambouloff better than

FIG. 1.

from the merely printed descriptions which were published at the time. The facts of the outrage are fresh in the memory of everyone. It will be remembered that the deceased statesman was attacked by three men armed with

FIG. 2.

knives and was terribly cut about the head and hands, which he raised to protect his head. Fig. 1, the front view, shows very well an extensive slash (*a*) passing from the right temporal region across the right orbit and the root of the nose to a point on the inner side of the lower border of the left orbit, this being the wound which necessitated the removal of the eyeball. Fig. 2, depicting the wounds on the left side of the face, shows the commencement of the most extensive slash of all (*b*), though not the cruellest in its effect. Starting just above the left eyebrow, it runs back, crossing the middle line at the top of the forehead to end by crossing back again to the left side in the parietal region, as shown in Fig. 4. Fig. 3 depicts the

FIG. 3.

gashes on the right side of the face, which are seen to be much less numerous than on the left, where the temporal and parietal regions were extensively cut about. On the back of the head is a perfect maze of cuts (*b*, *h*, *n*, *m*, *l*, Fig. 4),

FIG. 4.

the horseshoe cut marked (*l*) being particularly extensive. The force with which the blows were given may be inferred from the fact that the skull was fractured in several places.

THE HOLIDAY SEASON AND RAILWAY FACILITIES.

(*Continued from p. 345.*)

AMONG the most useful books published by some of the railway companies, either gratuitously or for the modest sum of one penny, are the lists of country lodgings, farmhouses, &c. Besides those referred to in our article last week we may mention the list published by the Great Eastern Railway Company, giving details of lodgings in Essex, Hertfordshire, Cambridgeshire, Suffolk, and Norfolk. The Great Western Railway Company's list includes Guernsey and Jersey, besides the other places on their lines, and the list of the Great Northern Railway Company embraces Hertfordshire, Cambridgeshire, Huntingdonshire, Northamptonshire, Norfolk, Lincolnshire, Nottinghamshire, Derbyshire, and Yorkshire. The London and South-Western Railway Company's Programme of cheap tickets and general excursion arrangements gives a list of apartments to be let

in North Cornwall. Of other books and pamphlets the Great Eastern Railway Company's list is very comprehensive. Visitors to the Continent will find the "Tourist Guide" (price 6*d*.) useful. Small pamphlets on Continental travel are also published. "East Coast Watering-places" gives particulars of time and fare to the watering-places touched by this line. "Summer Holidays in the Land of the Broads" (with descriptive notes and illustrations and a road map), "Holiday Notes in East Anglia," "The Rivers and Broads of Norfolk and Suffolk," and an eight-page pamphlet, "Quiet Nooks on the Norfolk Coast," form exhaustive guides to this part of England. The "Tourist Programme of the Great Northern and North-Eastern Railway Company" gives illustrated and descriptive notes of the east coast route to Scotland, and some useful information is contained in the "Tourist and Excursion Programme of the Great Northern Railway of Ireland." The North British Railway Company issue a "Handy Pocket Guide to Scotland" (price 6*d*.).

Great Eastern Railway.—Until October this company announce cheap tours by the Harwich route to Holland and Germany *viâ* the Hook of Holland, and to Belgium and Switzerland *viâ* Antwerp. For 42*s*. first class and 31*s*. second class a ticket available for a week can be obtained to Amsterdam (exhibition open till October), but they can be used outward only by the Friday or Saturday boat. The return can be made, however, on any day up to and including the following Saturday. To Cologne the first-class return fare is 67*s*. 6*d*., and the second-class return fare 44*s*. 9*d*. Berlin and back can be done for first class 116*s*., or second class 81*s*. All the Continental tours by this company are cheap and admirably arranged for the convenience of travellers, as are also the English tours. Of the latter the cheap circular tours by rail and saloon steamboats through the Broads of Norfolk and Suffolk *viâ* the rivers Bure and Yare deserve special mention. Various local tours in connexion with the Broads are also arranged. The various pamphlets issued gratis by the company give full information.

Great Northern Railway.—Tourists' tickets between the stations on this line in England and Scotland are issued till the end of the year at reasonable fares, and every facility is given the traveller for breaking his journey to visit the many places of interest in the country through which this line passes. The "Tourist Programme" contains a long list of tours. On Aug. 17th, 19th, 24th, 26th, and 31st trains leave London and suburban stations from 6.37 A.M. to 7.35 A.M. for Skegness at the return fare of 4*s*. 6*d*. for the day or 6*s*. for a three to four days' trip. Tickets are issued every day for the day trips, but only on Saturdays for the longer periods. Fortnightly tickets are also issued at very cheap fares. The direct express service of this company from England and Wales to Belfast and the principal stations on the Great Northern Railway of Ireland *viâ* Holyhead offers facilities for tourists to visit some of the finest scenery in that country. From the principal Irish towns circular tours are offered, in some cases at very moderate fares.

London and South-Western Railway.—Arrangements have been made with the Western Railway of France for the issue of circular tickets from London to Paris and back available for the return journey within two months. These return tickets are specially applicable to those who propose on their visit to Paris to take a tour through Normandy and Brittany. Tour 1: Waterloo, Southampton, Havre, Rouen, Paris, Versailles, Dreux, Laigle, Argentan, Vire, Pontorson (*viâ* Folligny or Mortain), Mont St. Michel, St. Malo, Jersey, Guernsey, Southampton, London; or returning from Paris *viâ* Versailles, Chartres, Nogent-le-Rotrou, Le Mans, Laval, Vitre, Rennes, St. Malo, Jersey, Guernsey, Southampton, Waterloo. These tickets are also available to go *viâ* Guernsey, Jersey, and St. Malo, &c. to Paris, and to return *viâ* Rouen, Havre, and Southampton to London. First class, 85*s*. 8*d*.; second class, 62*s*. 6*d*. Tour 2: Waterloo, Southampton, Havre, Rouen, Paris, Versailles, Dreux, Laigle, Argentan, Vire, Granville, Jersey, Guernsey, Southampton, London. These tickets are also available to go *viâ* Guernsey, Jersey, Granville, &c. to Paris, and to return *viâ* Rouen, Havre, and Southampton to London. First class, 81*s*. 4*d*.; second class, 59*s*. Passengers holding these tickets are permitted to break their journey at any intermediate station *en route* on the French railway on condition that they present their tickets on arrival to be stamped with the stamp of the station at which they stop. The tickets are available for two months; they can, however, be extended for another month on payment of 10 per cent. on the original cost of the ticket.

Special cheap return tickets are issued from Southampton to Guernsey and Jersey by steamers at 11.45 A.M. and 12 midnight, at the following fares:—Saloon, 20*s*.; fore cabin, 14*s*., available to return on the following Monday or Tuesday only: saloon, 25*s*.; fore cabin, 17*s*. 6*d*., available to return on the following Saturday (eighth day), Monday week (tenth day), Saturday week (fifteenth day), and Monday fortnight (seventeenth day). Every Tuesday until further notice cheap return tickets will be issued from Southampton to Guernsey and Jersey by boat at 12 midnight, at the following fares: Saloon, 25*s*.; fore cabin, 17*s*. 6*d*. They are available to return on the following Thursday (third day), Tuesday (eighth day), Thursday week (tenth day), or Tuesday week (fifteenth day).

Fast excursion trains from London to the West of England will run every Friday night during August and September. A special cheap excursion train will run from London to Exeter, Okehampton, Tavistock, Devonport, Plymouth, Barnstaple, Bideford and Ilfracombe, &c., as under:—

Stations.	Times.	Fares.
London ... dep.	p.m. 10.15	s. d.
Exeter { Queen-street ... arr.	a.m. 2.48	15 0
Exeter { St. David's ... "	2.58	15 0
Crediton ... "	3.14	15 6
Yeoford ... "	3.22	15 6
Eggesford ... "	3.52	17 0
South Molton-road ... "	3.57	17 0
Barnstaple Junction ... "	4.24	18 0
Braunton (for Saunton Sands) ... "	4.48	19 0
Morthoe (for Woolacombe Sands) ... "	5.2	20 0
Ilfracombe ... "	5.14	20 0
Instow ... "	4.43	19 0
Bideford ... "	4.52	19 0
Torrington ... "	5.7	20 0
North Tawton ... "	3.40	16 6
Okehampton ... "	3.53	17 6
Lidford ... "	4.14	19 0
Tavistock ... "	4.28	
Beer Alston ... "	4.41	
St. Budeaux ... "	4.57	
Ford ... "	5.2	21 0
Devonport ... "	5.5	21 0
Plymouth { North-road ... "	5.13	
Plymouth { Mutley ... "	5.16	
Plymouth { Friary ... "	5.28	

The tickets issued by this excursion will be available to return on the following Monday, Saturday week, Monday week, Saturday fortnight, or Monday fortnight following the date of issue.

Great Western Railway.—The pleasure resorts in Dorsetshire, Somersetshire, Devonshire, Cornwall, the Scilly and Channel Islands, Wales, south and east coasts of England, inland watering-places, and Scotland, Ireland, and Paris are all served by this company. Guernsey and Jersey can be reached from London for 38*s*., including saloon on steamer. The boat train leaves Paddington at 9.15 P.M. daily, except on Sunday, and the passage from Weymouth to Jersey in the express twin-screw mail steamships *Ibex*, *Antelope*, *Gazelle*, and *Lynx* occupies about six hours only.

North British Railway.—The West Highland Railway, one of the extensions of this company, has made easy of access some of the best scenery in Scotland. Among the circular tours announced by this company are: 1. The Trossachs and Lochs Katrine and Lomond *viâ* Edinburgh, Forth Bridge, Dunfermline, Stirling, Aberfoyle, Trossachs, sail on Loch Katrine, coach to and sail on Loch Lomond, Dumbarton (or *viâ* Callander instead of Aberfoyle). Fares:—Edinburgh, first class, 26*s*. 4*d*.; third class, 20*s*. 4*d*.; Glasgow (*viâ* Larbert), first class, 20*s*. 4*d*.; third class, 16*s*. 4*d*. The same tour may be made from Edinburgh *viâ* Linlithgow and Stirling instead of over the Forth Bridge at same fares. 2. Bridge of Orchy, Glencoe, Ballachulish, Port William *viâ* Bridge of Orchy, Glencoe, and Ballachulish, and returning by rail. Fares:—Edinburgh, first class, 42*s*. 4*d*.; third class, 29*s*. 1*d*. Glasgow, first class, 34*s*. 10*d*.; third class, 25*s*. 1*d*. 3. Perth, Dunkeld, Kingussie, Tulloch, Fort William *viâ* Glenfarg, Kingussie, and Tulloch, returning *viâ* Ardlui. Fares:—Edinburgh, first class, 51*s*. 1*d*.; third class, 32*s*. 9*d*. Glasgow, first class, 47*s*. 2*d*.; third class, 30*s*. 6*d*. 4. Aberfoyle, Trossachs, Loch Katrine, Loch Lomond, Fort William, Oban, and Crinan Canal *viâ* Aberfoyle, Trossachs, Inversnaid, and Ardlui, returning *viâ* Oban and Crinan Canal. Fares:—Edinburgh, first class, 48*s*. 2*d*.; third class, 30*s*. 11*d*. Glasgow, first class, 41*s*. 7*d*.; third class, 26*s*. 11*d*.

A new night express train with sleeping carriages now leaves Edinburgh (Waverley) daily (Sundays excepted) at 9.30 P.M., reaching London (King's Cross) at 6.20 A.M. Passengers for this train leave Inverness at 3 P.M., Aberdeen at 5.30 P.M., Montrose at 6.29 P.M., Arbroath at 6.53 P.M., Dundee (Tay Bridge) at 7.30 P.M., Perth at 7.55 P.M., Oban at 4.15 P.M., Glasgow at 8 P.M., and Fort William at 3.15 P.M. A train with Pullman sleeping car also leaves Edinburgh for London (St. Pancras) at 9.45 P.M. Passengers from Inverness, Aberdeen, Montrose, Arbroath, Dundee, Perth, Oban, Glasgow, and Fort William leave these places at the times shown above. This train will convey passengers for Manchester, Liverpool, Sheffield, Birmingham, Bristol, London, and for the Midland counties and West of England generally. The 10.30 P.M. train from Edinburgh (Waverley) to London (King's Cross) now leaves at 10.40 P.M. and arrives at London at 8 A.M. Passengers for this train leave Inverness at 3 P.M., Aberdeen at 6.50 P.M., Montrose at 7.45 P.M., Arbroath at 8.9 P.M., Dundee at 8.40 P.M., Perth at 7.55 P.M., Oban at 4.15 P.M., Glasgow at 9.5 P.M., and Fort William at 4.20 P.M. This train has a Pullman sleeping car attached.

London, Brighton, and South Coast Railway.—Among the many tours offered by this company that comprising the whole of the coast between Hastings and the Isle of Wight should prove an attractive one. Monthly tourist tickets from London will be issued every day till the end of October, offering facilities for visiting Hastings, St. Leonards, Eastbourne, Brighton, Worthing, Littlehampton, Bognor, Portsmouth, the Isle of Wight, and almost every intermediate coast-town and village. This tour comprises nearly 300 miles of the most charming railway and steamboat travelling in the United Kingdom. The journey may be made from London Bridge, Victoria, or Kensington, and can be taken either way, going first to Hastings and thence by the South Coast line to Portsmouth, proceeding from Portsmouth by mail steamers to Ryde, and returning from Portsmouth, terminating the trip at any stopping station of the London, Brighton, and South Coast Railway between Portsmouth and London, or reversing the route by going first to Portsmouth, and returning by Brighton, Hastings, &c. For the whole round (exclusive of pier dues at Ryde) the fares are—first class, 37*s.*; second class, 27*s.*; third class, 18*s.* Tickets are available for all trains, and can be had at London Bridge or Victoria Stations, and at the West-end offices, 28, Regent-street, Piccadilly, and 8, Grand Hotel-buildings, Trafalgar-square; also at Cook's Tourist Office, Ludgate-circus, and Gaze's Tourist Office, 142, Strand. The tourist and excursion programme gives details of various Continental tours, including a most comprehensive list of Italian tours.

London, Chatham, and Dover Railway.—This company offer some cheap excursions to the watering-places along the north and north-east coast of Kent. The week-end trips to the north of France, which run every Friday, Saturday, and Sunday, will be found convenient by those who can only spare a few days. The tickets are available for return by any boat and train up to and including the 3.45 P.M. service from Calais on the Monday following date of issue. Trains leave the London stations shortly after 8 P.M. on Fridays and Saturdays, and 9 A.M. on Saturdays and Sundays, arriving at Calais about noon and midnight respectively. Return fares 31*s.*, 26*s.*, and 20*s.* Third-class tickets are not issued for the morning service. Quick services are announced for Switzerland and Italy.

The *Cambrian Railways* issue an excellent programme of rail and coach excursions to places of interest adjacent to their lines in wild and picturesque Wales. First and third class tourist tickets, available for two calendar months, renewable up to Dec. 31st, are issued to Oct. 31st at all the principal stations in England, Scotland, and Ireland to Aberystwyth, Borth, Machynlleth, Aberdovey, Towyn, Dolgelley, Barmouth, Harlech, Portmadoc, Criccieth, Pwllheli, Rhayader, Builth Wells, and Brecon. The scenery traversed by and adjacent to the Cambrian Railways is of an exceedingly varied and beautiful description, and the coast of Cardigan Bay, to which the line affords the most convenient access, offers great advantages for sea-bathing in the long reaches of firm, safe, and sandy beach with which it abounds. The air is pure and bracing. The mountain ranges of Snowdon, Cader Idris, Plinlimmon, and the Beacons, with their rivers and lakes, are also readily accessible from the various watering-places, thus placing within the reach of visitors a delightful combination of the natural beauties of sea and land. The Upper Valleys of the Wye, the Severn, and the Usk, through which the line to Brecon runs, also possess great attractions for tourists and anglers. Arrangements are made during the summer months for the conveyance of visitors by coach to and from places of interest in the vicinity of the line at reduced charges, by which means, and also by the Festiniog, Tal-y-llyn, and Corris miniature gauge railways, whose termini are on the Cambrian system, the following amongst other places can easily be visited by daily excursions:—Snowdon, Beddgelert, Tan-y-bwlch, Maentwrog, Festiniog, Slate Quarries, Cader Idris, Mawddach Estuary, Precipice Walk and Torrent Walk, Tyn-y-groes, Pistyll-y-Caen, &c. (Dolgelley), Taly-y-llyn Lake, Corris, Llyfnant Valley, Glaspwll Cascade, Rheidol Lake, Devil's Bridge, Abersoch, Nevin, Clynnog, Nantgwillt (the site of the new Birmingham Water Works), Happy Valley, Cwmbychan Lake, Drws Ardudwy, Rhenig Valley, Dinas Mawddwy, and Bwchoerddrws Pass. About thirty rail and coach excursions daily are run from the Cambrian stations during the season. An excellent feature of the Cambrian Railways is the issuing of cheap weekly season tickets for 15*s.* third class, and 25*s.* first class, enabling the holders to travel by any trains between all the coast stations, including Machynlleth and Dolgelley.

THE FATAL ATTACK ON THE SON OF A MEDICAL MAN AT LIVERPOOL.

THE poor boy William Ireland, the son of Mr. R. J. Ireland, M.R.C.S., L.R.C.P. Irel., of Walton, Liverpool, who is alleged to have received terrible injuries at the hands of a Mr. O'Callaghan, described as a medical man and Mr. Ireland's assistant, on the night of Thursday, Aug. 8th, died early last Wednesday morning, five days after his injuries were inflicted. We need not dilate on the circumstances of the crime, and as the alleged murderer is now under remand all speculation as to his measure of guilt would be obviously unbecoming. There is no certainty about the weapon with which the abdominal wound was made or of the means by which the boy received his other injuries, though it seems probable that the gash through which the bowels protruded was made by a piece of broken glass from a dressing-mirror which was smashed, and which to all appearance would have inflicted just such a wound. The site of this gash was a little internal to and above the anterior superior iliac spine on the left side. It was a jagged, irregular wound about two inches long in its greatest diameter, which was towards the chest. The abdominal planes of muscle beneath were irregularly divided in a situation slightly superior to the skin wound, and the peritoneum divided a little superior again to the division of the muscles, so that the cavity of the abdomen was opened in a valvular manner, the tract of the opening slanting upwards through the abdominal wall. Three feet of small intestine had escaped from the wound, a result which is accounted for by the fact that some delay elapsed between the infliction of the injury and the arrival of the poor child at the Bootle Borough Hospital, whither he was taken on being found by the police to have received these serious injuries. As a result of exposure the gut was covered with fluff and dirt. The hernia was immediately cleaned by the senior house surgeon, Mr. H. B. Dickinson, and reduced into the abdomen, the wound dressed and a drainage tube inserted. During the dressing on the following day a small piece of gut which presented at the opening in the peritoneum was observed to be turning black. This was accordingly brought slightly out of the wound, and when adhesions were formed, opened and an artificial anus established in the usual way, the operation being performed by Mr. James Pearson, surgeon to the hospital. The boy, who was an exceptionally hardy little fellow of about twelve years of age, survived till the following Wednesday morning, but never really flattered his medical attendants with any hope of recovery. Although the abdominal wound was the injury that must be looked upon as the cause of death, he was also bruised all over, having one large bruise on the forehead, another one on the right cheek; the lobe of the right ear was torn up from the face, there was an irregular and jagged cut on the left side of the neck, a large bruise on the penis, and

numerous small bruises on both arms and both legs, besides other bruises, small and large, on the body and buttocks.

As we have said, it would be wrong for us at this stage to comment upon the case from any medico-legal point of view. The prisoner, who is under remand, has been stated in the press to be a medical man, but we have been unable to find his name in the Medical Register.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Brighton Urban Sanitary District.—Dr. Arthur Newsholme has arranged for his annual report for 1894 several interesting diagrams in which the excess or defect in the death-rate, &c., above the mean for the last twenty-five years is well set forth. During 1894 the illegitimate births proved to be a proportion in excess of any since the year 1883. Commenting upon the effect of a diminishing birth-rate upon the death-rate, Dr. Newsholme points out that, although for a time a diminished birth-rate tends rather to lower the death-rate, its continuance for another forty or fifty years would have the effect of increasing the proportion of persons at ages above fifty-five or so, and so of raising the general death-rate. This general effect is, he points out, anticipated in the case of Brighton by the fact that a large number of aged persons settle there. For instance, in the 1891 census it was shown that for every 1000 persons living at all ages in the respective towns there were at ages above fifty-five, 121 in Brighton, 101 in Croydon, 93 in Huddersfield, and 85 in Derby. Under five years of age, however, the figures were for Huddersfield 98, Brighton 103, Croydon 114, and Derby 119. During 1894 the recorded death-rate for Brighton was 16·4, the corrected 16·6, the death-rate of the most densely populated ward being 18·6 per 1000, as against 13·3 for the rest of the borough. In dealing with the death-rate from phthisis—which is, by the way, showing a tendency downwards—Dr. Newsholme remarks that in several cases death occurred within a few weeks of the patient's arrival in Brighton. He strongly deprecates the sending of patients to the seaside in the last stage of phthisis. In two cases of small-pox the evidence obtained pointed to some "Sunlight Soap" coupons from an infected district as having been the means of conveying the disease. Fifty-three cases of enteric fever had their origin in Brighton during 1894, and after making a careful and exhaustive inquiry into the history of the cases Dr. Newsholme came to the conclusion that no less than fifteen of them were caused by sewage-contaminated oysters, while six others, he states, were ascribable to other contaminated shell-fish eaten in an uncooked condition. He further remarks that of the remaining thirty-two cases, in seven no definite history was obtainable and in twenty-five shell-fish as a cause was excluded. From this summary Dr. Newsholme observes: "It will be seen that at least 40 per cent. of the cases of enteric fever originating in Brighton during last year were ascribable to sewage-contaminated shell-fish, a fact of the practical bearings of which it is my duty to warn the public of Brighton."

Finchley Urban Sanitary District.—Dr. H. R. Kenwood records in his current annual report for this district an interesting outbreak of throat affection which resembled diphtheria, but which apparently could not be regarded as that disease. It seems to have been an infectious follicular tonsillitis. Dr. Kenwood considers that the evidence pointed strongly to milk as having been the agent by which the disease was conveyed. On examining the cows which furnished milk to the infected area Dr. Kenwood discovered that three of them were evidently out of health; in each case the teats were slightly ulcerated, and one of the cows had a small chronic abscess in the udder. Dr. Kenwood was further able to demonstrate the very important fact that though the milk from these cows was distributed to only 17 per cent. of the total houses in the district it supplied no less than 94 per cent. of the houses infected. This certainly appears to be very strong evidence. Commenting upon the above outbreak Dr. Kenwood observes that the machinery for preventing occurrences of this kind is not all that it should be. He considers that a regular and systematic inspection of the cows in each district should be made at short intervals, and that a veterinary expert should be appointed by several sanitary authorities in combination. It is, Dr. Kenwood says, somewhat strange that although these milk-borne epidemics are frequently cropping up, there is nothing done to prevent their recurrence, and that all action is aimed at preventing the spread of an outbreak after much damage has been already affected. With Dr. Kenwood's views we have much sympathy, and we have frequently suggested in our columns similar action. A short time since, in reference to the report of the Royal Commission on Tuberculosis, we expressed a hope that it would lead to some regular inspection of milch cows and their surroundings.

Southport Urban Sanitary District.—The age and sex grouping of the population of Southport (44,928) is, Dr. Henry Vernon observes, a peculiar one, as compared with a normal English grouping in a population of the same number. Under fifteen years of age the population of Southport shows a deficit of 2643 persons, while in practically all the age groupings over fifteen Southport has an excess of persons as compared with the population of England and Wales as a whole. In every 1000 of the Southport population there are 590·710 females and 409·290 males, as compared with 515·286 females and 484·714 males in England and Wales, as evidenced by the 1891 census. Dr. Vernon estimates the local death-rate for 1894 as 14·32 per 1000, the corrections made consisting of the addition to the deaths occurring in the borough of those dying outside but belonging to the district, together with a subtraction of moribund visitors and an allowance for the gain derived from the peculiar age and sex distribution of the population. In commenting upon the calculation of a local death-rate Dr. Vernon observes: "If it tends to evolve a true biometric result to 'count in' the deaths of persons who may have left Southport ten or twenty years ago to seek the shelter of Ormskirk workhouse it cannot tend to an untrue result to 'count out' the deaths of those who have only been with us a few weeks, and who were known to have arrived stricken with mortal sickness. The inevitable conclusion seems to be that a time limit should be fixed after which deaths should be debited to the localities where they actually occur."

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 5616 births and 4225 deaths were registered during the week ending Aug. 10th. The annual rate of mortality in these towns, which had been 22·5 and 20·7 per 1000 in the two preceding weeks, was last week 20·8. In London the rate was equal to 19·0 per 1000, while it averaged 22·1 in the thirty-two provincial towns. The lowest rates in these towns were 13·6 in Croydon, 14·2 in Huddersfield, 14·6 in Bristol, 15·3 in Brighton, and 15·5 in Portsmouth; the highest rates were 26·8 in Salford, 27·1 in Manchester, 30·5 in Liverpool, 31·0 in Wolverhampton, and 33·8 in Preston. The 4225 deaths included 1077 which were referred to the principal zymotic diseases, against 1206 and 1178 in the two preceding weeks; of these, 736 resulted from diarrhœa, 109 from measles, 76 from diphtheria, 65 from whooping-cough, 46 from "fever" (principally enteric), 39 from scarlet fever, and 6 from small-pox. The lowest death-rates from these diseases were recorded in Plymouth, Bristol, Huddersfield, Halifax, and Newcastle-upon-Tyne; and the highest rates in Liverpool, Bolton, Preston, Wolverhampton, and Norwich. The greatest mortality from measles occurred in West Ham, Manchester, and Blackburn; from whooping-cough in Oldham; and from diarrhœa in Liverpool, Hull, Sheffield, Leicester, Bolton, Preston, Wolverhampton, and Norwich. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 76 deaths from diphtheria included 55 in London, 4 in West Ham, and 3 in Liverpool. Three fatal cases of small-pox were registered in London, 2 in Oldham, and 1 in Liverpool, but not one in any other of the thirty-three towns. There were 273 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, Aug. 10th., against 89, 199, and 237 at the end of the three preceding weeks; 54 new cases were admitted during the week, against 23, 115, and 60 in the three preceding weeks. The number of scarlet

fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2511, against 2267, 2347, and 2423 on the three preceding Saturdays; 281 new cases were admitted during the week, against 220, 249, and 247 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 185 and 171 in the two preceding weeks, further declined to 159 last week, and were 23 below the corrected average. The causes of 46, or 1·1 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Cardiff, Oldham, Bradford, Sunderland, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in Birkenhead, Liverpool, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·3 and 18·0 per 1000 in the two preceding weeks, further declined to 17·6 during the week ending Aug. 10th, and was 3·2 per 1000 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 16·0 in Edinburgh and 17·1 in Leith to 19·6 in Paisley and 20·9 in Greenock. The 509 deaths in these towns included 68 which were referred to diarrhœa, 17 to whooping-cough, 8 to measles, 4 to scarlet fever, 4 to "fever," 1 to diphtheria, and not one to small-pox. In all, 102 deaths resulted from these principal zymotic diseases, against 92 and 84 in the two preceding weeks. These 102 deaths were equal to an annual rate of 3·5 per 1000, which was 1·8 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had been 64 and 55 in the two preceding weeks, rose again to 68 last week, of which 34 occurred in Glasgow, 8 in Edinburgh, 8 in Dundee, and 6 in Greenock. The deaths referred to whooping-cough, which had been 7 and 12 in the two preceding weeks, further rose to 17 last week, and included 5 in Glasgow and 5 in Dundee. The 8 fatal cases of measles exceeded by one the number in the preceding week, and included 5 in Glasgow. The deaths from scarlet-fever, which had been 3 in each of the two preceding weeks, were 4 last week, of which 3 occurred in Glasgow, where 2 of the 4 fatal cases of "fever" were also recorded. The deaths referred to diseases of the respiratory organs in these towns, which had been 59 and 77 in the two preceding weeks, declined to 67 last week, but were 11 above the number in the corresponding week of last year. The causes of 23, or nearly 5 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 23·9 and 25·7 per 1000 in the two preceding weeks, declined again to 22·2 during the week ending Aug. 10th. During the past six weeks of the current quarter the death-rate in the city has averaged 23·6 per 1000, the rate during the same period being 20·0 in London and 15·9 in Edinburgh. The 149 deaths registered in Dublin during the week under notice showed a decline of 23 from the number in the preceding week, and included 27 which were referred to the principal zymotic diseases, against 28 and 25 in the two preceding weeks; of these, 23 resulted from diarrhœa, 3 from "fever," 1 from whooping-cough, and not one either from small-pox, measles, scarlet fever, or diphtheria. These 149 deaths were equal to an annual rate of 4·0 per 1000, the zymotic death-rate during the same period being 4·7 in London and 2·3 in Edinburgh. The fatal cases of diarrhœa, which had been 16, 24, and 17 in the three preceding weeks, rose again to 23 last week. The 3 deaths referred to different forms of "fever" exceeded those recorded in any recent week, while the mortality from whooping-cough showed a further decline. The 149 deaths in Dublin last week included 46 of infants under one year of age, and 19 of persons aged upwards of sixty years; the deaths of infants showed an increase upon the number in the preceding week, while those of elderly persons were considerably below the number recorded in any recent week Three inquest cases and 3 deaths from violence were registered; and 29, or nearly one-fifth, of the deaths occurred in public institutions. The causes of 17, or more than 11 per cent., of the deaths in the city last week were no certified.

VITAL STATISTICS OF LONDON DURING JULY, 1895.

In the accompanying table will be found summarised complete statistics relating to sickness and mortality during July in each of the forty-three sanitary areas of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 11·6 per 1000 of the population, estimated at 4,392,346 persons in the middle of the current year. In the three preceding months the rates had been 5·7, 6·8, and 8·4 per 1000 respectively. Among the various sanitary areas the rates were considerably below the average in Westminster, St. James Westminster, Stoke Newington, St. Olave Southwark, Bermondsey, Wandsworth, and Lee; while they showed the largest excess in Chelsea, Bethnal Green, Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, and Greenwich. The prevalence of small-pox in London showed a marked increase in July, 258 cases being notified during the month, including 59 in Whitechapel, 31 in St. George Southwark, 24 in Mile End Old Town, 18 in Bethnal Green, and 15 in Camberwell sanitary areas. The Metropolitan Asylum Hospitals contained 232 small-pox patients at the end of July, against 34, 20, and 33 at the end of the three preceding months; the weekly admissions averaged 49, against 7, 5, and 10 in the three preceding months. The prevalence of scarlet fever in London showed a further marked increase upon that recorded in recent months; this disease was proportionally most prevalent in Chelsea, St. George Hanover-square, Strand, Shoreditch, Whitechapel, St. George-in-the-East, Limehouse, and Mile End Old Town sanitary areas. The Metropolitan Asylum Hospitals contained 2340 scarlet fever patients at the end of July, against 1413, 1481, and 1845 at the end of the three preceding months; the weekly admissions averaged 263, against 132, 167, and 229 in the three preceding months. The prevalence of diphtheria in London showed a further increase during July; among the various sanitary areas this disease showed the highest proportional prevalence in Chelsea, Bethnal Green, Whitechapel, St. George-in-the-East, Mile End Old Town, Poplar, and Rotherhithe. There were 680 cases of diphtheria under treatment in the Metropolitan Asylum Hospitals at the end of July, against 430, 508, and 633 at the end of the three preceding months; the weekly admissions averaged 103, against 69, 81, and 109 in the three preceding months. The prevalence of enteric fever in London showed a slight increase during July; this disease was proportionally most prevalent in Hackney, St. Luke, Shoreditch, Limehouse, Woolwich, and Plumstead sanitary areas. Erysipelas was proportionally most prevalent in Marylebone, Shoreditch, Bethnal Green, Limehouse, and Mile End Old Town sanitary areas. The 18 cases of puerperal fever notified during July included 3 in Islington, and 2 each in Fulham, Lambeth, Wandsworth, and Lewisham sanitary areas.

The mortality statistics in the accompanying table relate to the deaths of persons actually belonging to the various sanitary areas, the deaths occurring in the institutions of London having been distributed among the different sanitary areas in which the patients had previously resided. During the five weeks ending Saturday, Aug. 3rd, the deaths of 8851 persons belonging to London were registered, equal to an annual rate of 21·0 per 1000 of the population, against 18·3, 15·9, and 14·9 in the three preceding months. The lowest death-rates during July in the various sanitary areas were 8·9 in Hampstead, 10·5 in Lee, 11·3 in St. James Westminster, 11·5 in Stoke Newington, 12·4 in Plumstead, and 12·7 in St. George Hanover-square; the highest rates were 29·2 in Whitechapel, 29·4 in St. Saviour Southwark, 29·5 in St. Olave Southwark, 29·8 in Holborn, 31·0 in Mile End Old Town, 35·2 in Limehouse, 39·0 in St. George-in-the-East, and 47·3 in St. Luke. During the five weeks of July 2463 deaths were referred to the principal zymotic diseases in London; of these, 1576 resulted from diarrhœa, 391 from measles, 242 from diphtheria, 111 from whooping-cough, 93 from scarlet fever, 44 from different forms of "fever" (including 42 from enteric fever and 2 from ill-defined forms of continued fever), and 6 from small-pox. These 2463 deaths were equal to an annual rate of 5·8 per 1000. The lowest zymotic death-rates were recorded in St. George Hanover-square, St. James Westminster, Hampstead, City of London, Lee, and Plumstead; and the highest rates in St. Luke, Shoreditch, Bethnal Green, St. George-in-the-East, Limehouse, Mile

MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON—JULY, 1895.

(Specially compiled for THE LANCET.)

SANITARY AREAS.	Estimated population in the middle of 1895.	NOTIFIED CASES OF INFECTIOUS DISEASE.										DEATHS FROM PRINCIPAL INFECTIOUS DISEASES.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of Infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.†	Measles.	Scarlet fever.	Diphtheria.†	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	4,362,346	258	2387	1185	1	229	13	18	573	13	4877	11·6	6	391	93	242	111	—	42	2	1576	2463	5·8	8851	21·0	289
West Districts.																										
Paddington	122,756	1	63	32	—	6	—	1	11	1	115	9·8	—	5	3	5	5	—	3	—	45	66	5·6	239	20·3	287
Kensington	167,671	3	64	60	—	7	—	1	29	—	164	10·2	—	—	1	12	3	—	—	—	49	65	4·0	280	17·4	304
Hammersmith	108,429	1	54	35	—	4	—	—	6	—	100	9·6	—	—	2	7	3	—	—	—	31	43	4·1	190	18·3	260
Fulham	117,745	—	33	52	—	3	—	2	12	—	102	9·0	—	10	3	9	7	—	1	—	48	78	6·9	224	19·8	281
Chelsea	99,930	3	84	45	—	5	—	1	11	—	149	15·6	—	1	5	7	—	—	1	—	25	39	4·1	172	17·9	247
St. George Hanover-square	74,037	—	57	14	—	—	1	—	9	—	81	11·4	—	—	2	3	—	—	—	1	10	16	2·3	90	12·7	109
Westminster	54,003	3	25	8	—	1	—	—	2	—	39	7·5	—	2	1	1	—	—	1	—	14	19	3·7	100	19·3	295
St. James Westminster	23,149	1	6	4	—	—	—	—	3	—	14	6·3	—	—	1	—	—	—	—	—	3	4	1·8	25	11·3	208
North Districts.																										
Marylebone	137,392	14	48	23	—	12	—	—	33	—	135	10·2	—	1	—	5	2	—	—	—	31	39	3·0	270	20·5	234
Hampstead	77,592	1	46	14	—	5	1	1	5	—	73	9·8	—	—	—	1	2	—	—	—	5	8	1·1	66	8·9	154
St. Pancras	233,543	4	153	63	—	13	—	—	29	—	262	11·7	1	14	3	7	8	—	—	—	89	122	5·4	439	19·6	300
Islington	336,929	6	215	48	—	6	3	3	32	—	313	9·7	—	35	8	10	4	—	1	1	112	171	5·3	607	18·8	244
Stoke Newington	35,234	—	9	4	—	1	—	—	5	—	19	5·6	—	2	—	1	1	—	—	—	10	14	4·1	39	11·5	190
Hackney	215,623	5	100	34	—	20	—	—	25	—	184	8·9	—	19	6	3	4	—	4	—	84	120	5·8	385	18·6	330
Central Districts.																										
St. Giles	37,654	8	26	4	—	4	—	—	2	—	44	12·2	—	1	—	1	—	—	—	—	10	12	3·3	71	19·7	370
St. Martin-in-the-Fields	13,536	3	4	4	—	1	—	—	2	—	14	10·8	—	—	1	—	—	—	—	—	3	4	3·1	24	18·5	316
Strand	22,586	2	22	—	—	1	—	—	1	—	26	12·0	2	—	2	1	—	—	—	—	5	10	4·6	50	23·2	333
Holborn	32,188	4	5	11	—	—	—	—	8	—	28	9·1	—	5	—	1	—	—	—	—	14	20	6·5	92	29·8	337
Clerkenwell	65,036	2	26	18	—	4	—	—	8	—	58	9·3	—	9	1	2	6	—	—	—	30	48	7·7	179	28·7	415
St. Luke	40,763	2	12	12	—	5	1	—	11	—	43	11·0	—	44	2	5	2	—	1	—	36	90	23·0	185	47·3	409
City of London	33,824	4	22	8	—	—	1	—	3	—	38	11·7	—	1	—	—	—	—	—	—	3	4	1·2	49	15·1	217
East Districts.																										
Shoreditch	122,932	7	93	29	—	14	—	—	34	—	178	15·1	—	9	5	6	3	—	5	—	84	112	9·5	312	26·5	380
Bethnal Green	130,061	18	67	75	—	7	1	—	32	—	200	16·0	—	14	4	15	3	—	1	—	81	118	9·5	321	25·7	313
Whitechapel	75,820	59	72	45	—	4	—	—	12	—	192	26·4	—	16	1	7	1	—	1	—	21	47	6·5	212	29·2	308
St. George-in-the-East	45,227	6	55	36	—	—	—	—	8	—	105	24·2	—	26	1	4	2	—	—	—	22	55	12·7	169	39·0	397
Limehouse	56,885	8	70	25	—	7	—	—	13	—	123	22·6	—	27	3	5	2	—	1	—	26	64	11·7	192	35·2	351
Mile End Old Town	108,443	24	82	65	—	6	—	—	22	—	199	19·1	—	25	1	15	2	—	1	—	69	113	10·9	322	31·0	350
Poplar	171,230	5	109	82	—	15	—	—	29	—	240	14·6	—	36	6	14	4	—	3	—	70	133	8·1	442	26·9	340
South Districts.																										
St. Saviour Southwark	26,570	—	14	6	—	—	—	—	2	—	22	8·6	—	3	4	1	—	—	—	—	9	17	6·7	75	29·4	380
St. George Southwark	60,168	31	20	8	—	2	—	—	3	—	64	11·1	—	7	1	1	4	—	2	—	35	50	8·7	178	30·8	380
Newington	119,358	6	44	47	—	7	—	—	17	—	121	10·6	—	3	2	6	7	—	1	—	40	59	5·2	264	23·1	309
St. Olave Southwark	13,065	1	2	4	—	—	—	—	—	—	7	5·6	—	—	—	1	—	—	—	—	4	5	4·0	37	29·5	237
Bermondsey	83,861	1	35	14	—	2	—	1	7	—	60	7·5	—	18	2	3	1	—	—	—	33	57	7·1	186	23·1	227
Rotherhithe	40,713	1	15	24	2	—	—	—	4	—	46	11·8	—	2	—	3	—	—	—	—	10	15	3·8	70	17·9	219
Lambeth	264,893	8	144	102	1	12	4	2	37	11	321	11·8	—	21	3	17	19	—	1	—	128	189	6·9	613	22·4	286
Battersea	165,130	3	90	36	—	4	—	1	25	—	159	10·0	—	18	6	5	3	—	3	—	69	104	6·6	331	20·9	334
Wandsworth	185,956	—	66	44	—	7	—	2	14	1	134	7·5	—	2	2	6	1	—	—	—	47	58	3·3	243	13·6	192
Camberwell	252,737	15	80	99	—	9	—	1	28	—	232	9·6	3	11	2	28	5	—	3	—	84	136	5·6	475	19·6	296
Greenwich	175,183	—	119	114	—	6	—	—	21	—	260	15·5	—	1	5	19	2	—	—	—	50	77	4·6	341	20·3	297
Lewisham (excluding Penge)	82,410	1	48	12	—	4	—	2	3	—	70	8·9	—	1	1	1	3	—	1	—	21	28	3·5	108	13·7	186
Woolwich	42,768	—	34	12	—	8	—	—	6	—	60	14·6	—	1	3	3	—	—	3	—	6	16	3·9	72	17·6	176
Lee	38,832	—	14	—	—	1	—	—	6	—	21	5·6	—	1	—	—	—	—	—	—	3	4	1·1	39	10·5	130
Plumstead	61,494	1	35	8	—	14	1	—	3	—	62	10·5	—	—	—	1	2	—	4	—	7	14	2·4	73	12·4	126
Port of London	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 41 cases of membranous croup.

† Including deaths from membranous croup.

End Old Town, and St. George Southwark sanitary areas. Six fatal cases of small-pox were registered in London during the month under notice, the corrected average in the corresponding periods of the ten preceding years being 10; of these 6 fatal cases 3 belonged to Camberwell, 2 to Strand, and 1 to St. Pancras sanitary areas. The 391 deaths referred to measles were 99 above the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in St. Luke, Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, Poplar, and Bermondsey. The 93 fatal cases of scarlet fever were within 3 of the corrected average number; this disease showed the highest proportional fatality in the Strand, St. Saviour Southwark, and Woolwich sanitary areas. The 242 deaths referred to diphtheria exceeded by 91 the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in Fulham, St. Luke, Bethnal Green, Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, Camberwell, and Greenwich. The 111 fatal cases of whooping-cough were less than half the corrected average number; this disease showed the highest proportional fatality in Fulham, Clerkenwell, St. George Southwark, Newington, and Lambeth sanitary areas. The 42 deaths referred to enteric fever were 9 below the corrected average number; there was no marked excess of "fever" mortality last month in any of the sanitary areas. The 1576 fatal cases of diarrhœa exceeded by as many as 517 the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in St. Luke, Shoreditch, Bethnal Green, St. George-in-the-East, Limehouse, Mile End Old Town, St. George Southwark, and Lambeth. In conclusion, it may be stated that the mortality in London during July from these principal zymotic diseases was more than 31 per cent. above the average, owing principally to the excessive fatality of summer diarrhœa.

Infant mortality in London during July, measured by the proportion of deaths under one year of age to registered births, was equal to 289 per 1000, and considerably exceeded the average. Among the various sanitary areas the lowest rates of infant mortality were recorded in St. George Hanover-square, Hampstead, Stoke Newington, Lee, Lewisham, Woolwich and Plumstead; and the highest rates in St. Giles, Clerkenwell, St. Luke, Shoreditch, St. George-in-the-East, St. Saviour Southwark, and St. George Southwark.

THE SERVICES.

ARMY MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel John Henry Hughes, M.D., to be Surgeon-Colonel, vice S. Archer, retired. Surgeon-Lieutenant-Colonel Richard Exham to be Brigade-Surgeon-Lieutenant-Colonel, vice R. N. Mally, deceased. Surgeon-Lieutenant-Colonel James Macnamara, M.D., to be Brigade-Surgeon-Lieutenant-Colonel, vice J. H. Hughes, M.D. The undermentioned Surgeons on probation are gazetted as Surgeon-Lieutenants:—Lionel Fergus Smith, M.B.; Robert James Blackham; Septimus Harold Fairrie, M.B.; George Thelwall Kindersley Maurice; Rupert Fawssett; John Vincent Forrest, M.B.; Henry William Grattan; Francis Ernest Gunter; John Hay Campbell; and John Grech.

INDIA AND THE INDIAN MEDICAL SERVICES.

Brigade-Surgeon-Lieutenant-Colonel and Temporary Surgeon-Colonel William Roe Hooper is granted the temporary rank of Surgeon-Major-General. The services of Surgeon-Captain H. B. Melville, M.B., C.M., are replaced temporarily at the disposal of the Military Department. Surgeon-Major C. Monks has delivered over charge of the office of the Superintendent of Mahabaleshvar. Surgeon-Captain T. E. Dyson, M.B., C.M., and Surgeon-Major K. S. Nariman have respectively delivered over and received charge of the office of the Deputy Sanitary Commissioner, Gujarat Registration District. Surgeon-Captain G. B. Russell, A.M.S., is appointed Personal Assistant to the Principal Medical Officer, Madras Command. The services of the undermentioned medical officers of the Bengal Establishment are placed permanently at the disposal of the Government of the North-West Provinces and Oudh:—Surgeon-Captain C. C. Manifold; Surgeon-Major G. M. J. Giles, M.B., F.R.C.S.; and Surgeon-Captain J. M. Crawford, M.B., C.M.

NAVAL MEDICAL SERVICE.

The following appointments are announced:—Staff-Surgeon John D. Henwood to the *Devastation*; Surgeon S. Walter Bowden, D.S.O., to the *Urgent*.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant Herbert Woodley Joyce, 2nd Volunteer Battalion the Buffs (East Kent Regiment), to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Artillery: 2nd Glamorganshire: Surgeon-Lieutenant P. R. Griffiths, M.B., resigns his commission. *Royal Engineers:* 1st Sussex: Second-Lieutenant G. A. Skinner is appointed Surgeon-Lieutenant. *Rifle:* 1st Surrey (South London): Surgeon-Lieutenant W. A. Atkinson, M.B., to be Surgeon-Captain.

CHITRAL.

The future of Chitral appears to be pretty well settled. The policy adopted by the present Government is not to remove altogether the troops from that country, but to maintain a hold on it by retaining a native force at Chitral and by utilising the services of native levies and the aid of the Khan of Dir's troops for the protection of the country in the vicinity of that station. Surgeon-Major Sir George Robertson will shortly proceed to Chitral in connexion with a settlement of the country. A force composed of a battalion of Goorkhas and one of the Punjab Infantry, with guns, will garrison Chitral, but no British troops will remain across the frontier. This policy of compromise is stated to have been received with much satisfaction by the Government of India. The Chitral expedition has not only shown the gallantry of the troops taking part in it, especially of the native portion, but it has afforded the medical service of India an opportunity of exhibiting its bravery and devotion. In other respects also the expedition has been productive of some good. The Chitral war has shown the practical impossibility of invading India from the north-west by a large force from Central Asia. The topographical difficulties in the way of marching any large army over such mountainous tracts of country would probably prove for Russia an insurmountable task. The experience we have gained in this expedition of the Lee-Metford rifle in action has moreover led to an investigation which will probably add to our present knowledge in regard to arms of precision and the surgery of modern warfare.

THE COMPETITIVE EXAMINATIONS FOR HER MAJESTY'S MEDICAL SERVICES.

The following are the lists of successful candidates at the recent examinations:—

BRITISH MEDICAL SERVICE.

Name.	Marks.	Name.	Marks.
F. S. Brereton	2685	M. L. M. Vaudin	2213
J. C. B. Stratham	2324	W. A. Ward	2167
P. J. Probyn	2265	E. G. Forrest	2053
R. M. le H. Cooper	2259	A. W. Hooper	2005
A. H. Waring	2214	E. C. Hayes	2001

INDIAN MEDICAL SERVICE.

Name.	Marks.	Name.	Marks.
W. W. Clemesha	2605	C. R. Bakhla	2279
A. W. R. Cochrane	2594	K. V. Kirkday	2260
V. E. H. Lindesay	2500	E. R. Rost	2254
R. P. Wilson	2446	C. B. Harrison	2238
N. R. J. Rainier	2441	W. J. Niblock	2227
E. L. Perry	2423	E. Le F. Payne	2223
J. A. Black	2411	N. P. O'G. Lalor	2222
J. H. Symons	2337	J. C. Robertson	2212

THE ARMY AND NAVY ESTIMATES.

The estimates having been framed by the preceding, and accepted by the present, Government, their discussion will not give much room for adverse criticism on the part of the Opposition. The question of who is to be the successor to the Duke of Cambridge must be settled, and the policy in regard to Chitral and other matters will probably be discussed. It seems to be generally assumed that Lord Wolseley will succeed the Duke of Cambridge in the newly created appointment, and his rank and reputation, his military services, and proved ability and experience point him out as the man best fitted for the post. We can only hope that his Lordship will be just and generous in his dealings with the Army Medical Services.

THE EX-MINISTER FOR INDIA.

The retirement of no one of the ex-Ministers of the late Government will probably be more regretted in India than that of Sir Henry Fowler from the post he filled at the India Office. Apart from all party considerations, Sir Henry Fowler's speeches and conduct in regard to the opium question and

other matters showed that he had a manly, independent, and judicial way of considering and discussing Indian questions and a firm "grip" of his subjects. In saying this we are only expressing what was, we believe, the general opinion on both sides of the House, which was endorsed in India.

DEATH IN THE SERVICES.

With regret we announce the death of Brigade-Surgeon John Proudfoot Stratton, Bombay Army (retired), Political Agent, Bundelkund, in his sixty-seventh year. He took part in the Indian Mutiny Campaign, and retired in 1886.

Under the provisions of an Order in Council Surgeon George Fletcher Collins, of H.M.S. *Pembroke*, Chatham, withdraws from the Royal Navy, with a gratuity of £1000, after eight years' service.

Correspondence.

"Audi alteram partem."

"NOTE ON A RARE CONDITION OF THE OMENTUM."

To the Editors of THE LANCET.

SIRS,—The condition described in your columns of Aug. 10th by Mr. Greig Smith is one which falls exactly into place in a small group of cases, somewhere about ten in number, in my own experience. They are all exactly alike, and the state and appearance of the vessels are exactly described by Mr. Greig Smith when he says that they "resembled fat, well-developed earthworms." The group of cases I refer to constitutes one of the many outlying corners of abdominal surgery which I have been struggling to get into book shape for some years, but so far unsuccessfully. The cases are certainly those in which a pelvic tumour has become rotated and slowly strangulated—acute strangulation has an altogether different history and result. The slow strangulation results in a union to the tumour of the fringe of the omentum, the gradual increase of the vessels of the apron, and the separation of the tumour from its original stock, with a final transplantation on to the omentum. The complete history of this process is built up in a series of my own observations, and is quite substantiated by isolated observations of other surgeons published here and there. The tumours in which this transplantation occurs are chiefly ovarian, but are also occasionally myomatous. Generally their pelvic pedicle has disappeared by the time matters have reached the stage noted in Mr. Greig Smith's case. He says nothing about a pelvic pedicle (though he says the tumour was pelvic), and therefore I assume it had disappeared. If the tumour was originally a strangulated uterine myoma he will find no evidence now of a pedicle on the tumour, but in a separated ovarian tumour it would not be difficult to do so.

I am, Sirs, yours obediently,

The Crescent, Birmingham, Aug. 12th, 1895. LAWSON TAIT.

A MODERN PANACEA.

To the Editors of THE LANCET.

SIRS,—Being at my wits' end for a means of curing a case of ringworm of the scalp which had flourished under treatments many and various, I in May last began to treat it with the solution of the biniodide of mercury. The hair was removed, the crusts were washed carefully away, and the biniodide solution was applied thoroughly by myself, three times a week at first, then every day. At the end of a month the result was *nil*, or almost *nil*; any little improvement that there was might be accounted for by the extra cleanliness and care taken in keeping the hair short and the scalp free from scurf. The strength of the solution was then doubled and for another month the game went on, and that head is as it was. I am now about to apply the solution in the strength of one drachm to the ounce, this being the "strong blistering fluid" which, when diluted three times, forms the application that has worked such wonders for its discoverer. If this succeeds I shall be disposed to think that croton oil or any other "strong blistering fluid" would have done likewise, for it will be quite logical to conclude that the improvement will be due to the blistering rather than to the blister. One always instinctively views with suspicion any drug or means of treatment that has claimed for it powers that are at once extraordinary and widespread, and such, I must confess, was my attitude towards the biniodide treatment of ringworm of the scalp. For has not biniodide of mercury removed the dangers of scarlet fever during 1894? Has it not robbed influenza of its terrors, chronic diarrhœa of its inconveniences, children of their teeth grinding, and insects of their stings during the present year of grace?

I am, Sirs, yours faithfully,

Blackpool, Aug. 10th, 1895. LEONARD MOLLOY.

"CASTRATION FOR OVERGROWTH OF PROSTATE."

To the Editors of THE LANCET.

SIRS,—In your annotations (THE LANCET, p. 45, July 6th, 1895), in discussing the subject of castration for overgrowth of the prostate, you mention a paper which I recently read at the annual meeting of the American Surgical Association, and say thereof: "He had collected 111 cases of double castration by competent surgeons for enlarged prostate in extreme and exaggerated forms, which, he said, had 'resulted in cures.' All the same, he went on to show that twenty of these had died." Nothing in the paper, as read, as abstracted in the *New York Medical Record* (June 1st and 8th), from which you quote, or as published in full in "The Annals of Surgery" (July) justifies the statement that I said the 111 cases had resulted in cures. The next succeeding sentence in your annotation—"in 87·2 per cent. rapid atrophy of the prostate follows"—is sufficient evidence of the inaccuracy of the preceding paragraph, which I have quoted. I have endeavoured from the beginning not to make extravagant claims for this operation, and I shall be obliged if you will publish this correction.

I am, Sirs, yours faithfully,

Aug. 8th, 1895. J. WILLIAM WHITE.

*** We gladly insert Dr. White's letter. We said in our annotation that Dr. White showed that 20 of the 111 cases of double castration for prostatic overgrowth had died, and we were somewhat puzzled to know how this consisted with the statement in an earlier part of the report that "these cases, extreme and aggravated types, all by competent surgeons, had resulted in cures." We now see that these words are meant to apply to three cases, the histories of which were related as examples. We are sorry in any way to have misread the report of a very interesting communication.—ED. L.

OSTEO-ARTHROPATHY.

To the Editors of THE LANCET.

SIRS,—Your brief report of a case shown by me at the annual meeting of the British Medical Association at the Clinico-Pathological Museum contains a few statements which may mislead those who have not seen the case. It was a typical case of "pulmonary hypertrophic osteo-arthropathy" as differentiated by Marie from acromegaly. The hyperplasia is almost entirely bony, if we except the joints and the soft parts around the ankles. There is no lipping or alteration in the small details of the bone, the changes being massive in the affected parts. Although primarily a case of bronchitis and emphysema there is also some tuberculous consolidation.

I am, Sirs, yours truly,

Finsbury-circus, E.C., Aug. 13th, 1895. F. R. WALTERS.

"SPECIALISM IN MEDICINE."

To the Editors of THE LANCET.

SIRS,—The following information may assist you in answering the questions you ask in your recent leading article on the above subject. A few years ago, before I started practice, I met a friend whom I had lost sight of for some time and found that he had just consulted a well-known specialist for nasal obstruction, which he was anxious to get rid of before being ordained. Acting upon this gentleman's advice he was about to undergo an operation, and for that

purpose was to reside two or three weeks in a private hospital. The treatment, he told me, was to cost him considerably over £50. Knowing that he could ill afford the expense, and failing to see the necessity for such a lengthy course of treatment, or, indeed, for residence in hospital at all, I strongly advised him to disregard his appointments with the specialist and to consult a well-known general surgeon connected with a large London hospital. I afterwards learned from this surgeon that at two short sittings in his consulting-room he had done all that was required—viz., removed a nasal polypus and cauterised a hypertrophied mucous membrane. A few months later I met my friend again. He was very grateful to me, as the obstruction had been completely removed at the moderate cost of four guineas. Another very similar case occurred a few weeks ago in the practice of a brother medical man, to whom I am indebted for the particulars. Without his knowledge a patient of his had consulted a well-known specialist for nasal obstruction caused by a deflection of the septum. He had been told that for the necessary operation for its removal he must reside in a private hospital for at least a fortnight. His medical man, on being consulted, expressed his readiness to perform the operation in his consulting-room; but, finding that the patient was somewhat staggered at the marked difference with which the gravity of the operation was regarded by his two advisers, suggested that he should consult a third. Thereupon he consulted a general surgeon, whose name is well known in the profession, who operated in his consulting-room the same day, using cocaine, and sent him back to Wales the day following. The surgeon is still in ignorance that anyone else had been previously consulted. If you wish it I have no doubt I could supply you with the names and addresses of the patient's practitioner, surgeons, and specialist. As far as my experience goes, but it only extends to four years of private practice, probably the greatest abuse of the kind exists in connexion with the little operation for the removal of adenoids, which doubtless brings more grist to the special mill than any other. We all know that in the out-patient department of a London hospital the patient after this operation is generally sent home as soon as he has recovered from the anæsthetic, with instructions as to diet and to "come again next week." I am frequently hearing of patients being kept in a private hospital a week and even longer, of a nurse having been in continual attendance for the same period when the operation has been done in a private house, and of a staff of assistants having been present at the operation, and all this not necessarily in the case of wealthy patients, but of those out of consideration for whose slender purses the fee has been graciously reduced to twenty-five or thirty guineas. Now in these cases the fee is always proportionate to the fuss, and no one can possibly doubt that these methods of treatment, or at all events of after-treatment, are urged for any other than commercial reasons. As you say, we practitioners have it in our own hands to stamp out this bane of honest practice. If those who could were to make a point of attending the special departments of a large hospital they would soon find out how frequently they could dispense with the services of a specialist. Where this cannot be done we should in the end be the gainers by sinking petty jealousy and consulting each other more frequently. But above all, where it is desirable to obtain the best possible advice and the greatest skill, let us send our patients to a general surgeon or physician who in an out-patient special department has gained full experience in the so-called speciality, rather than to the man who spends all his time looking into an auditory meatus or observing three or four square inches of mucous membrane. By so doing we shall consult not only our patients' interests but also our own.

I am, Sirs, your faithfully,

July 29th, 1895. A GENERAL PRACTITIONER.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Recent Assizes: Crimes of Violence and Intemperance.

THE cases tried at the assizes which terminated on the 9th inst. furnish a very sad commentary on the efforts of humanitarians and philanthropists. The May assizes comprised a charge of murder of a most deliberate and aggravated character, being followed by the execution of the prisoner; and yet there were four charges of murder at the assizes held just two months later, none of them resulting in the capital conviction and sentence. In one case the prisoner cut his wife's throat while in a state of drunken frenzy, afterwards attempting his own life by cutting his throat. As is so often the case, the homicidal wound was instantly fatal, while the suicidal was less severe, and by skilful surgical treatment at the Northern Hospital the fatal issue was averted. In this, as in other cases of the kind, it is very probable that the prisoner was more drugged than drunk with the abominable adulterated beer sold in the lower parts of the city. It would be well if temperance advocates were to take note of this circumstance. Four men were charged with aggravated assaults on their wives, and three were sentenced to penal servitude for three years each, and the fourth to two years' imprisonment with hard labour. In one of these cases a conviction was obtained although the wife refused to say anything about the stabbing, while their son, aged twelve, who had in the first instance informed the police that he saw his father stab his mother with a clasp-knife, at the trial stated that it was a lie. Referring to the case mentioned in a former letter, in which a woman was charged with manslaughter in the case of a man who had died under the administration of chloroform, the prisoner was, at the instigation of the learned judge (Mr. Justice Cave), indicted for unlawfully wounding, and was sentenced to three years' penal servitude. A woman was sentenced to fifteen years' penal servitude for procuring abortion upon a woman who afterwards died, the judge ruling that the charge of murder could not be sustained.

Prevention of Cruelty to Children.

During the month of July the local Society for the Prevention of Cruelty to Children took up 112 new and 75 old cases, the former involving the welfare of 193, and the latter that of 101, children. Among the complaints were 3 of assault, 2 of excessive beating, 15 of ill-treatment, 155 of general neglect, 35 of begging by day, 12 of begging by night, selling after hours, exposure, sleeping-out, and dangerous surroundings. In 48 cases the parents were prosecuted and punished, in 82 cases the children were left with them subject to visitation, 169 parents were cautioned by the magistrates, and 65 by the Society. Nineteen children were committed to industrial schools.

The Holiday Season.

For many obvious reasons the August Bank Holiday is the most popular of all four. On the 5th inst. it broke all previous records in this city and neighbourhood, the crowds at the different railway stations and ferries exceeding by thousands those of any preceding year. It is very satisfactory that, notwithstanding this circumstance, there were no serious accidents reported. The holiday season here begins in July and is well advanced now, the various steamers to North Wales, the Isle of Man, Scotland, Belfast, and elsewhere being very busy. Season tickets are granted on most advantageous terms, and may be recommended as very good health prescriptions. A very pleasant day may be spent on board the steamer on the passage to and from the Menai Straits, the passenger returning to Liverpool each day. The boat starts at 10.45 A.M. daily, returning about 7 P.M. Many persons have found this a most excellent means of recruiting their health. The voyage to and from the Isle of Man occupies from four to five hours; the island as a health resort is almost unrivalled, the accommodation in hotels and lodgings being ample. Another very healthy and favourite trip is from Liverpool to Leith and back, the boat calling at intermediate ports and enabling the traveller to witness the grand scenery of the west, north, and east coasts of Scotland; the trip occupies a fortnight.

The Attack on a Lad at Walton.

The unfortunate lad William Ireland, the son of a medical man at Walton, died this morning at the Bootle Borough Hospital from the injuries received last week at the hands, it is alleged, of Mr. O'Callaghan, Mr. Ireland's assistant.

Aug. 14th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Fire at Minto House, Edinburgh.

AT the end of last week a fire occurred in Minto House, Chamber's-street, Edinburgh, which is part of the Extra-mural School of Medicine. It has done considerable damage

to the building, but that can be easily repaired, but some of the things destroyed cannot be replaced. The greatest sufferer has been Dr. Halliday Croom, who has lost his entire museum, the collecting of his whole professional life. He lectures on midwifery at Minto House, and much sympathy is felt for him in the loss of his teaching appliances. Dr. Haultain has also lost some of his teaching appliances, but his loss is small compared with Dr. Croom's.

The Edinburgh Royal Infirmary.

At the meeting of the managers of the Royal Infirmary yesterday the quarterly accounts showed an expenditure diminished by £755 as compared with the corresponding quarter of last year. Mr. Walcot, who submitted the statement, assured the board that while there was this diminution in outlay the comfort of the patients and the efficiency of the institution had not been lowered in any way, and that the first duty of the management was fully recognised to be the care of the patients and the maintenance of the honour of the institution in the administrative as well as in the medical and surgical departments. This reduced expenditure must be regarded as most satisfactory, but it could not be expected that it should be unaccompanied by suggestions of "cheeseparing" in different departments. All sensible people will agree that the utmost economy consistent with the high position the Royal Infirmary occupies is the object to be aimed at by the management.

The late Dr. John Howie Carslaw.

Dr. Carslaw was one of the most prominent of the younger generation of Glasgow medical men, and his early death has been a painful shock to his many friends. He received his education, literary and medical, at Glasgow University, where he graduated as M.A. in 1882, M.B. (with honours) in 1886, and M.D. (with honours) in 1893. He also studied at several German universities. His clinical knowledge was acquired mainly at the Western Infirmary, the hospital associated with the university, where he was successively house physician and house surgeon, and ultimately one of the physicians to the dispensary or out-patient department. He had, moreover, an extensive experience of infectious disease, gained at the City Fever Hospital, Belvidere, where he held a resident appointment. Dr. Carslaw was on the editorial staff of the *Glasgow Medical Journal*, and contributed to it articles principally founded on his observations at the Belvidere Hospital. In his position as assistant to the Professor of Practice of Medicine he showed himself to be an able clinical teacher, and in various ways exercised much influence for good.

Aug. 13th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Rotunda Hospital.

AT a meeting of the governors and guardians of this hospital held on the 2nd inst. the office of consulting physician to the institution, rendered vacant by the death of the late Sir George Porter, was filled by the unanimous election of Sir Philip Crampton Smyly, Surgeon in Ordinary to Her Majesty the Queen in Ireland. A letter was read from her Excellency the Countess Cadogan, stating that she would have much pleasure in visiting the hospital on Friday, Aug. 30th, for the purpose of declaring the new surgical wing open for the reception of patients. His Excellency the Lord Lieutenant also expressed his intention of being present on that occasion. This visit of the Viceroy and viceregal party to the Rotunda Hospital will be the first occasion on which the patronage of the new representative of the Queen in Ireland will be conferred on a charitable institution.

The Irish Pharmaceutical Society.

A number of prosecutions have recently been instituted by the Pharmaceutical Society of Ireland. Messrs. Fannin and Co. of Grafton-street, Dublin, a firm of the highest respectability, were first attacked, and pleaded guilty of having infringed the very stringent provisions of the new Act. Last week Mr. John F. Corcoran was summoned and fined, a mitigated penalty having been agreed to; and the same course was adopted in the case of Mrs. Barnes, the proprietress of a druggist's shop in Charlemont-street.

The Viceregal Household.

His Excellency the Lord Lieutenant has been pleased to make the following appointments to the Household and Staff:—Physician-in-Ordinary, Mr. Walter G. Smith, M.D.; Surgeons-in-Ordinary, Mr. Edward Hamilton, M.D., F.R.C.S. Irel., and Mr. Kendal Franks, M.D., F.R.C.S. Irel.; Surgeon to the Household, Mr. T. Nedley, M.D.; and Surgeon-Dentist-in-Ordinary, Robert H. Moore, F.R.C.S. Irel.

A Fatality after Tooth Extraction.

The death of Mr. George Horan, which followed the extraction of some teeth by a dentist, has recently caused some interest and speculation in Dublin. The operation was followed by hæmorrhage of such a character that all efforts to control it proved unavailing and the patient died on the second day. The absence of a coroner's inquest has been the subject of rather unwise comment in some of the local papers, but it would appear that all the usual measures, including intravenous saline injection, were employed by a competent surgeon, though without avail. The patient was doubtless a victim to hæmophilia, and the catastrophe unavoidable.

Another Case of Ptomaine Poisoning.

The Limerick poisoning case, in which virulent products of decomposition disseminated through a quantity of custard from a single discoloured egg proved poisonous to a large number of persons and fatal to four, has not yet been forgotten in Dublin. Many letters have been addressed to the daily papers asking for information as to the nature of what, to many of the laity, are novel and hitherto unsuspected sources of danger in connexion with ordinary foods. The term "ptomaine poisoning," is not well understood, and, indeed, became familiar to many persons here for the first time only a few years ago when our popular and well-known city analyst, Sir Charles Cameron, suffered most severely from that form of poisoning, caused, in his case, by portions of a turkey which he unwittingly ate after it had been kept too long. His case was fully reported in the *Dublin Journal of Medical Science* by his friend and medical attendant, Dr. Hawtrey Benson. The illness, which lasted in his instance for many weeks, was caused beyond doubt by a single dose of slightly or partially decomposed meat. Now, an egg contains, from the biologist's point of view, all the complex and notoriously unstable substances which constitute protoplasm and are essential to life. The toxicologist knows that from such bodies, decomposed and regrouped, all the most virulent and subtle of the so-called ptomaine poisons may have their origin. Acute poisoning by decomposed egg is not, therefore, a surprise to him. An instance of food poisoning of a less virulent and serious character has recently occurred in Dublin, and, although owing to the absence of any fatality the particulars have not been made public, the facts are worthy of mention. At a large educational establishment some eight persons partook of stewed rhubarb from a dish which had been kept for some days and the contents of which had undergone slight fermentation and decomposition. They all suffered from gastro-intestinal catarrh of a more or less severe character; in other words, they all presented the symptoms of irritant poisoning. Happily, they all recovered after some days and are now in good health. The lesson, however, from these cases should not be overlooked. It is obviously unsafe to use as food either animal or vegetable substances which in hot weather have shown even the first indications of decomposition.

Diphtheria at Castleblayney.

I regret to report an outbreak of diphtheria at Castleblayney, there being several patients at present in the fever hospital. Some time ago a very serious outbreak, chiefly affecting children, occurred in the southern part of the county of Monaghan.

Medical Fees in Dublin.

The Recorder of Dublin has, in the recent case of White *v.* Russell, expressed himself on the subject of medical fees in Dublin in a manner to which the medical men in this city decidedly object. A correspondent of the *Irish Times* of Aug. 6th makes the spirited remark that "no person in any way acquainted with the duties and responsibilities of the medical profession could think for a moment that any fee less than £1 for three visits could sufficiently remunerate a medical practitioner for the care and attention which he

should devote to his patients, the English fees quoted being insufficient in most cases to pay for the bare car hire incurred in visiting."

Public Health and Sanitary Work in Dublin.

Sir Charles Cameron's report on the public health of Dublin during the four weeks ended June 29th shows that there were 571 deaths within the metropolitan registration area, giving a yearly ratio of 21·27 per 1000 persons living; within the municipal area, or city, there were 439 deaths, giving a yearly ratio of 23·35 per 1000 persons living. On the northern side of the city the rate was 21·95 and on the southern side 24·62 per 1000 persons living. The death-rate from the seven principal zymotic diseases was 1·5 per 1000 in the whole registration district, and 1·9 per 1000 in the city. On the northern side of the city the rate was 2·1 and on the southern side 1·7 per 1000. The total deaths attributed to zymotic diseases in the city of Dublin were 48, including 8 from small-pox, 1 from measles, 3 from scarlet fever, 8 from whooping-cough, 2 from diphtheria, and 6 from typhoid fever. The death-rate from all causes was 2·4 per 1000 below the mean rate for the corresponding period in the previous ten years. The zymotic death-rate was 0·7 per 1000 below the mean rate. Small-pox did not decrease very much during the month, 43 cases being notified, as compared with 66 in May (five weeks). One conviction was obtained under the Margarine Act and six (of milk vendors) under the Food and Drugs Act. Some of the specimens of milk analysed were of very poor quality, but not sufficiently so to warrant a certificate for adulteration.

The Water-supply at Belfast.

It was reported at the usual fortnightly meeting of the water board on Aug. 8th that, notwithstanding the recent rains, they had 254,000,000 gallons of water less than at the corresponding period of last year. This was due to the long period during which no rain fell. Another feature was the constantly increasing number of new houses which had to be supplied with water. They had passed 81 new houses on Aug. 8th, and at a previous meeting they had 123. It was suggested that the public should use the water as economically as possible. There was still, however, a 124 days' supply, which would last the city until the winter wet weather set in.

Rabies in the Downpatrick District.

At a meeting of the Downpatrick board of guardians held on Aug. 10th the question of the increase of rabies in the union was discussed, and it was decided by a majority to decline to sanction the issuing of an order for the muzzling of dogs; but it was unanimously agreed to requisition the Government to increase the dog tax. I am afraid this is simply shelving the matter for the present.

The Battle of the Clubs at Cork.

Last week Mr. Lee, honorary secretary to the Cork Medical Association, received a communication from the Mayor requesting him to meet him (the Mayor) and also the Grand Master of the Oddfellows, the President of the Bakers' Society, and the President of the Young Men's Benefit Society for the purpose of discussing the dispute between the medical profession and the clubs with a view to an amicable arrangement being arrived at, which the Mayor anxiously desires. The conference took place, and the club delegates frankly admitted that the Cork profession had substantial grievances to complain of. However, as Mr. Lee explained that he had come through courtesy to the Mayor, but that he was not authorised to enter into negotiations, the Mayor stated that he would request the medical profession to send six representatives to confer with six delegates from the clubs, and he would undertake to preside at the meeting. I have no doubt the Cork profession will be quite prepared to discuss the situation with the clubs, and though, as sensible men, they may not assume an uncompromising attitude with regard to details, they will keep clearly before them the general interests of the profession and the fundamental principles which induced them to go into the fight.

An Illustrative Case.

A case has been partially investigated at the Police-court which throws a light on the action of the Cork clubs. A Mr. Carroll sued the secretary of the Irish National Foresters for £9 12*s.* which he claimed as sixteen weeks' sick pay. According to the statement of his solicitor he became ill early in January last and complained of cough, vomiting, and sore-throat. He went to the club medical officer, Mr. McLoughlin, who attended him from January to the beginning of April and treated him for dyspepsia, but as he was not improving he consulted a non-society medical man. The latter told him he was suffering from a grave lung disease and recommended him to give up his employment. Next day he saw Mr. McLoughlin and explained that he had seen a non-society medical man. Mr. McLoughlin then told him he had congestion of the lungs and promised him a certificate of unfitness for his employment. Later Mr. McLoughlin stated that he had handed the certificate to the Wood-ward, but that the latter would not receive it because the complainant had gone to a non-society medical man. Mr. Carroll thought it time to consult a solicitor, and in reply to a letter from his solicitor the following copy of a resolution was received:—"Resolved—That in consequence of Brother David Carroll having, during his illness, refused to comply with the rules of the branch, and the instructions of the branch surgeon, and refused to be medicinally treated or prescribed for by him, we consider he has acted in violation of the rules of the society, especially as the doctor under whose care he is at present refuses to act in consultation with the medical officer of this branch. We, therefore, declare that Brother Carroll has forfeited all claims on the funds of the Branch.—Brother Sheares." Mr. Carroll gave evidence in support of his claim, and the case is still under investigation by the magistrates.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Antitoxin and its Results.

PROFESSOR RICHET publishes in the *Revue Scientifique* some figures which speak eloquently in favour of the new treatment of diphtheria. Any impartial observer who reads the appended table will acknowledge that either the disease has during this year (1895) assumed a milder type—an unwarranted assumption in my opinion—or that Dr. Roux's serum has proved a blessing.

Fortnightly Mortality for the Period including the First Six Months in each of the Following Years.

Fortnight.	1884.	1887.	1890.	1891.	1892.	1893.	1894.	1895.
1st	97	81	55	74	49	83	75	26
2nd	106	42	51	78	60	70	57	15
3rd	102	73	81	76	46	51	53	23
4th	112	90	81	89	61	58	52	23
5th	145	84	83	93	66	62	65	22
6th	145	84	92	73	74	75	74	27
7th	121	78	93	76	56	62	54	15
8th	114	81	71	85	58	60	61	17
9th	106	74	86	69	55	61	52	19
10th	94	66	74	59	56	49	49	24
11th	103	73	66	62	73	53	45	15
12th	88	54	52	43	33	52	30	9
13th	67	55	78	33	55	46	38	4

Throughout his communication Professor Richet adopts a new spelling of the word *diphtéric*, which he writes *diftérie*. This is another attempt to forward the views of an influential party whose aim it has been for some years past to reform the orthography of a great many words in the French vocabulary. It is also a sign of the times that the *Médecine Moderne* informs its readers that it has printed the word *diphtheria* for the last time, and that it will in future adopt Professor Richet's spelling. It will, however, take some time to reconcile the medical world to this innovation.

Door-plates.

Visitors to Paris cannot fail to be struck with the absence of brass plates on the doors of the residences of medical men. As a matter of fact, a door-plate is considered *infra dig.* by our conservative French brethren. The only approach to our familiar door-plate that is tolerated is one bearing the

words "Docteur-Médecin." It would appear that the keenness of competition impels some practitioners to affix to their doors plates of greatly increased dimensions, some going to the length of adopting a sign suspended from their balconies or windows. This flagrant dereliction from professional dignity has evoked a protest from a member of the Syndicat des Médecins de la Seine, who brought the matter before his society at its last meeting.

The Continental Anglo-American Medical Society.

This useful society, which comprises almost all the British and American practitioners settled on the continent of Europe and in North Africa, held its annual meeting for the first time since its foundation (in 1889) out of Paris, the presence of so many of its members in England during the British Medical Association week having decided the choice of London as a place of reunion this year. About forty members assembled at the Savoy Hotel on Friday, Aug. 2nd, under the presidency of Sir Richard Quain, Bart., M.D., F.R.S., one of the society's most honoured honorary presidents. Five new members were admitted, these gentlemen hailing from Gibraltar, Tangier, Paris, Monte-Carlo, and Boulogne-sur-Mer. Dr. Barnard (the honorary secretary and treasurer) stated that the actual number of members amounted to ninety-six, and that every recruit at Continental health stations appeared anxious to join. A luncheon followed at the same hotel, the chair being again taken by Sir Richard Quain, whose genial toast, "Prosperity to the Society," was highly appreciated and loudly cheered. The company numbered fifty-four. Dr. Barnard (362, Rue St. Honoré, Paris) will supply any information regarding the society to any inquirers. I may mention in conclusion that it has been decided to hold the next annual meeting at the same time and place as the British Medical Association. Oxford is, I am informed, the *locus* selected.

Aug. 14th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

Fatal Coincidences.

IN a recent annotation in THE LANCET on "Alpine Misadventure"[1] a remark was made on the fallacy to which the classification of death-causes is liable, when, as in the case of Baron Peccoz, who was officially reported as "killed" on the Lysjoch last August, it turned out that he really "died" from syncope antecedent by a few seconds to his so-called "fatal slip" on the verge of the crevasse. But for the syncope, in other words, he would have kept his balance and extricated himself from the position in which he found himself—a position not more perilous than what he, a trained Alpine pedestrian, was habitually courting. A not less striking coincidence, in confirmation of that remark, has been reported from Turin, not far from where, at the Camp of Lombardore, during recent military evolutions, Lieutenant Tapparone was accused of having caused the death of the soldier Morfeo. Both officer and private belonged to a cavalry regiment, and it was alleged that the former, irritated by some *gaucherie* on the part of the latter, seized him violently, shook him off his horse, and killed him by the fall. Ever eager to find those in authority abusing their power, the "advanced" lay press was dilating on the brutality of Lieutenant Tapparone, and invoking public sympathy for his victim, when at the instance of the War Minister an inquiry was held on the whole case. It was established by cogent evidence, including eye-witnesses among Morfeo's comrades, that he was in no way violently handled, that he was not "pushed," but lightly touched, and that he actually "fell" from his horse; while by those who were his intimates he was known to have been for some time seriously out of health. On post-mortem examination there was found no trace of external lesion, but a very diffused cadaveric ecchymosis. The lungs were sound; but the heart was completely empty, having ceased to pulsate during the last systole. In the abdomen there was no extravasation of blood or serum; there were, however, marked intestinal adhesions—one, particularly pronounced, of the liver to its diaphragmatic vault, the result of an inflammation which had run its course in youth. No other viscus presented any abnormal feature; the brain also was healthy, without trace of apoplectic lesion. The medical report, in accordance with the necropsy, was, therefore, "il Morfeo è morto di sincope cardiaca." The syncope was, in fact, coincident with, or, more properly, immediately prior to, the fall from the horse—the final link in a chain of antecedent malaise. Lieutenant Tapparone was congratulated (and with every reason) on his narrow escape from a charge of manslaughter—a charge in which "appearances" were strongly against him till the medical finding put the matter in its true light.

[1] THE LANCET, July 20th, 1895.

A Centenarian Surgeon.

At Pesaro, on the Adriatic, Dr. Giacomo Asiari attained his hundredth year on the 29th ult., and a brief biography of him has just been issued by a local colleague, Dr. Carlo Rigoni, with the twofold object of putting on record the career of an interesting professional man and of establishing, subject to every available check, yet another *bonâ-fide* instance of a centenarian. Dr. Asiari was born at Forlì on July 29th, 1795, at noon. He studied at Forlì, Faenza, Ravenna, and Florence, at which latter school, on June 17th, 1821, he received his diploma in medicine and surgery. In 1823 he was called to Spoleto as "chirurgo primario" in the hospital there, and distinguished himself as an able and successful operator. His next appointment was in the University of Macerata, where he filled the post of "chirurgo primario" and reader in human anatomy. This readership he succeeded in getting transformed into a regular chair of anatomy, founding, indeed, a "scuola di anatomia" which was previously non-existent in that seat of learning. In 1829 he was called to Pesaro, once more as "chirurgo primario," and there his clinical duties and the calls of an ever-increasing *clientèle* kept him actively employed for the next thirty years, during which he took rank with the leading men of the city and province, like Count Cassi, Baldassini, Paoli, Petrucci, and Perticari. He attended, among other distinguished patients, Prince Charles Buonaparte when, in company with his brother Louis (afterwards Napoleon III.), the Prince in alighting from his carriage had gravely injured his knee. In the cholera year of 1855 he rendered invaluable service to the poorer victims of the disease, for which the Pesarese town council awarded him the gold medal of merit. Finally, in June, 1861, he went on the retired list, and the town council, in recognition of his merits as a surgeon and as a citizen, gave him a life pension equal in amount to the salary he drew in office. Dr. Asiari therefore made over his "armamentarium chirurgicum" to the San Salvatore Hospital and his fine medical library to the Bibliotheca Oliveriana. Since then he has enjoyed a serene and honoured old age, his one complaint being the intercurrent neuritis to which he has been subject for seventy-eight years.

Heat and Venomous Bites.

The prolonged sultry weather has added many more to the instances recently adduced of the virulence it imparts to the bites of venomous animals. The last one medically reported is that of a poor woman of Borgotaro, in the province of Parma, who, after working in the hayfield and partaking of a hearty meal on the spot, was bitten by a viper. She was attended to without loss of time, and the surgeon freely excised the seat of the bite and its immediate surroundings; but swelling rapidly set in, the cutaneous surface as a whole became a livid colour, and in barely ten minutes the patient died in agonising convulsions. Nor is it the venomous reptilia only whose poison is intensified by the more than subtropical heat we have lately been having. In the lake country, at Valmadrera, near Como, a deaf-mute was stung by a fly supposed to have been in previous contact with an animal affected with anthrax. The local inflammation soon became general, and after a day's excruciating pain, during which the unfortunate victim moved the compassion of all by his inability to describe his sensations and explain his wants, death supervened as a welcome relief. Flies, it is well known, exert a depurating function on the air, and when this becomes charged with noxious effluvia exhaling from freshly manured fields they imbibe enough to make their stings dangerously poisonous. The hotter the weather the more virulent the sting. In Switzerland, for example, where the practice of treating the freshly upturned earth with liquid manure is general throughout the summer,

the effluvia thence arising under exceptionally sultry days renders a walk or drive along her picturesque highways and byways a very chastened joy indeed. Not only so, but the common horse-fly in these circumstances becomes a formidably aggressive poisoner. Not so long ago at Thun a lady was stung under the lower eyelid by one of these winged tormentors, and in less than an hour such swelling and pain set in that nothing short of the best surgical interference, telegraphed for from Berne, succeeded in saving her life.

Professor Maragliano.

The interest aroused in Professor Maragliano's treatment of phthisis, as submitted to the British Medical Association, has extended to France. At the Congress of the Société de Médecine, which, under the presidency of Dr. Bouchard, opened its proceedings last week at Bordeaux, Professor Maragliano has been vouchsafed an entire sitting for the exposition and discussion of his views. Before leaving London he was, I may mention, "interviewed" by the representative of that widely diffused journal *Il Secolo*, to whom he expressed his high admiration of the sanitary institutions, the hospitals, and the whole hygienic organisations of the British capital. He was surprised at the solidarity prevailing among the British medical men, at their well-disciplined meetings, at the practical sense which guides them, not only in the field of science, but in that of professional interests. The admirable organisation of the meeting itself elicited his special commendation, its hospitality being "superiore alle speranze anche degli esigenti" (beyond the hopes even of the exacting). The scientific discussions he found impressed with the gravity proper to the practical genius of the race, and while he missed the enthusiastic outburst of his southern compatriots he remarked the "molta attenzione nel seguire le discussioni e le communicazioni scientifiche" (great attention in following the scientific discussions and communications).

Aug. 10th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Ménière's Disease.

PROFESSOR MAX GRUBER, at a recent meeting of the Vienna Otological Society, read a paper on Ménière's Disease. Ever since the attention of pathologists was directed to this disease and quinine was recommended by Charcot as a valuable remedy against it the recognition of it has been easy if vertigo, tinnitus aurium, and deafness are present. It has been proved that the vertigo results from disease of the semicircular canals. Ménière's disease may, however, according to Professor Gruber, be caused by secretory and exudative processes as well as by a hæmorrhage. Pigment originating from an extravasation may be found in the sacculus, cochlea, and semi-circular canals in the ears of persons who during life never suffered from vertigo. On the other hand, the aquæductus cochleæ, and especially the recessus Cotunnii, into which the aquæductus vestibuli discharges itself, must not be overlooked. This recessus varies greatly in size; sometimes it is hardly to be found, sometimes it is as large as a bean. The membranes of the recessus may be united by connective tissue, and then a lymph engorgement takes place, which produces an abnormal pressure and extravasation of blood, and consequently Ménière's symptoms. A too free use of alcohol may also give rise to these symptoms, because the secretion of lymph is increased in consequence of the determination of blood to the head. Professor Gruber proposed to restrict the name Ménière's disease to phenomena originating in the labyrinth and to separate it from feverish conditions such as labyrinthitis.

Asepsis and Antisepsis in Ophthalmology.

Ever since Gayet showed by his experiments that out of 178 inoculations of eyes cultures resulted in 139 cases and failed only in 39 cases, it has been recognised that an absolutely antiseptic condition of the conjunctiva is not to be obtained; the infective action, however, is limited to those micro-organisms which adhere to the surface of the epithelium. As corrosive sublimate produces opacity of the cornea, and some other remedies become decomposed or have a disagreeable odour, Dr. Grossmann in the *Therapeutische Wochenschrift* recommends cyanide of mercury. It has been employed by Chibret, and possesses the same bactericidal quality as corrosive sublimate, without irritating the tissues or coagulating albumen in such a marked degree as the latter. A solution of 1 in 5000 is sufficiently strong, but it must not be used when the capsule of the eyeball is to be opened, for if it penetrates into the anterior chamber of the eye it may injure the endothelium. Eye washes, as a rule, contain germs of micro-organisms even when prepared with distilled water. Dr. Grossmann therefore adopts Franke's proposal to make use of a solution of corrosive sublimate (1 part in 10,000) for the purpose of dissolving the salts of atropine, cocaine, and eserine; he also recommended frequent sterilisation by boiling.

The Effect of Compressed Air on the Health of Workmen.

In the issue of THE LANCET of July 6th I mentioned some cases of the so-called caisson disease produced by compressed air. The Council of Hygiene requested Professor Max Gruber to prepare a report on this subject, and he has now made the following recommendations: (1) the ventilation is to be improved with a view to diminish the carbonic acid contained in the air of the caissons; (2) a time of from seven to ten minutes is to be allowed for the entrance of the workmen; and (3) a permanent medical service is to be established, the medical officer of which shall satisfy himself as to the gradual condensation of the air. Dr. Silberstein has published an interesting article on Caisson Disease in the *Medicinische Wochenschrift*, mentioning the loss of control over the lower extremities, the urinary bladder, and the rectum as being by far the most important symptoms. He suggested the presence of nitrogen in the spinal cord, which, when the pressure becomes lowered to that of the external air, forms gaseous vesicles in the blood, and by obstructing the vessels produces the above-enumerated paralyses. Not uncommonly patients suffer also from vertigo, increased knee-jerks, and crackling in the knee-joint due to the pressure of gas liberated in the cellular tissue.

Death of Dr. Bettelheim.

By the death of Dr. Bettelheim, who passed away on July 26th, the medical profession in Vienna has lost one of its most able representatives. Born in Pressburg (Hungary) in 1844, he studied at the Vienna School of Medicine under Hyrtl, Rokitansky, Skoda, and Brüke, and after having obtained his diploma in 1866 he acted as assistant to the late Professor Oppolzer. In 1873 he was recognised as *privat-docent* in Pathology, and during the succeeding eight years edited the *Medicinisch-Chirurgische Rundschau*. Among his numerous published works I need mention only those on "Pneumonia Biliaris," "The Diagnosis of Cancer of the Stomach," and "The Use of Muriatic Acid in the Treatment of Gastric Diseases." Dr. Bettelheim felt himself slighted because he did not succeed in obtaining an ordinary professorship; during the last five years he was Primarius of the Rudolfinerhaus.

Aug. 10th.

CONSTANTINOPLE.

(FROM OUR OWN CORRESPONDENT.)

Granular Ophthalmia.

AT the last meeting of the Imperial Society of Medicine Dr. Malgat of Paris delivered a very interesting lecture on Granular Ophthalmia. A good many members attended, notwithstanding the very hot and oppressive weather which prevails here just now. Dr. Malgat first of all referred to the treatment of granular ophthalmia amongst the ancient Greeks and the Egyptians, and then enumerated the various methods that have been adopted up to the present time, showing that they were all inefficacious and dangerous. He then fully described the treatment by electrolysis. After demonstrating that the proposed cures by conjunctival cicatrices formerly recommended were not without danger for the patients, he declared that among fifty cases treated by the electrolytic method he had seen fifty complete cures without any cicatrix whatever, just as if the conjunctivæ had never been diseased. The practical application of electrolysis is neither painful nor complicated; on the contrary, it is wonderfully simple and does not involve the slightest danger to the eye. The apparatus used for the purpose is in the hands of all practitioners, being simply a

small Gaiffe's continuous current battery of seven pairs. Dr. Malgat uses negative electrolysis. In order to make sure of success it is necessary to follow the granulations everywhere, even into the cul-de-sac of the upper eyelid, and for this purpose it will often be necessary to make a small incision into the conjunctival cul-de-sac. Dr. Malgat always prefers this last method. At the conclusion of the meeting he was unanimously nominated a corresponding member of the society.

Cholera.

The epidemic has not quitted our country, but is slowly spreading in several provinces in the interior. The latest telegrams announce an outbreak of the disease in the provinces of Maamuret-ul-Aziz and Adana. At one of the villages in the former province no fewer than twenty-seven cases of cholera, with six deaths, occurred between July 20th and 22nd. Sporadic cases are reported from several villages in these two provinces.

Quarantine.

The General Board of Health decided at its meeting on July 22nd that arrivals from the littoral between Alexandria and Suedieh shall be subject to a quarantine of five days; vessels without passengers need not, however, remain in quarantine longer than twenty-four hours. The quarantine measures against arrivals from the Karamanian coast are maintained.

July 26th.

NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

A GENTLEMAN who seems to have devoted a certain portion of his leisure while in America in the direction of medical study, made a very sturdy attempt recently to compel the Registrar-General in Wellington to have his name placed on the list of recognised medical practitioners; in fact, Mr. Justice Richmond paid a high compliment to the applicant's counsel for the exceedingly able manner in which he had argued his case. Now, as a matter of fact, we have quite enough legalised medical practitioners in New Zealand at the present time without semi-qualified persons attempting to have their names enrolled on the list; indeed, it is only too true that the number of medical men coming to reside in this colony has increased very considerably of late. I fear many are disappointed with the general results attending their emigration here, for New Zealand is amply provided for in the way of medical men even unto the humblest country village. These remarks are penned in the hope that disappointment in the future may be saved, for New Zealand is not now the Elysium that it was for the medico. When the colony was in its infancy persons holding almost any kind of qualification were recognised as medical men, but times have changed since then, as the applicant has now discovered, for his request was emphatically refused by Mr. Justice Richmond, whose judgment will, let us hope, deter others from emulating such an example.

Obituary.

STEPHEN JENNINGS GOODFELLOW, M.D., F.R.C.P. LOND.

STEPHEN JENNINGS GOODFELLOW was born in Falmouth on Oct. 21st, 1809, his mother having come over from Portugal for her confinement, and returning to that country with him in the early part of 1810, his father, a member of an ancient Northamptonshire family, being then a merchant resident at Lisbon. They returned to England before the Peace of 1815, as Dr. Goodfellow remembered the illuminations at Falmouth on that occasion. His family were not greatly in sympathy with intellectual pursuits, but even as a very young man he showed marked ability, reading such works as "Locke on the Understanding," &c., for the pleasure of the intellectual exercise. He was very anxious to go either to Oxford or Cambridge, but, his father not being alive to the advantages of a university education for him, he was unable to go and therefore most gladly availed himself of the opportunities given by the establishment of the University of London. There he passed his examination as rapidly as possible. He has often described the difficulty of the *viva voce* in those early days, students passing from one table to another to be examined in six different subjects before quitting the examination room. He was an enthusiast in his profession, devoting many hours to its study, and when attached to the London Fever Hospital he often pursued his studies far into the night, once or twice being overtaken with sleep in the post-mortem room. He was particularly neat and skilful in his preparations of microscopic objects, and many of his preparations still exist in the museums of the Royal College of Surgeons of England and the Middlesex Hospital. He married in 1846 Elizabeth, the daughter of William Nanson Eyre of Carlisle. She took great interest in his scientific work, assisting in the translation of foreign works and helping in drawing diagrams and sketches to illustrate his lectures. He had a particularly happy method of teaching, as many of the old students who studied under him must remember. Everything was presented to the mind with great clearness and in an interesting manner. Even in his practice he made his patients understand the reason of much of his treatment, and was particularly successful with nervous and hysterical patients. He had at one time a large connexion in America, and many and urgent invitations were sent to him to visit Boston and other parts; and, though he never went over, many persons came from America on purpose to consult him. When he settled in London after his marriage he was one of the founders of an observation society, to which some of the subsequently leading members of the profession belonged. The members of this society met at each other's houses at stated intervals for the discussion of interesting cases and scientific facts.

Dr. Goodfellow was educated at grammar schools in Cornwall, the last one being the endowed school at Bodmin; his early professional education was under the superintendence of a gentleman in large general practice at St. Austell; in October, 1830, he entered at St. Bartholomew's Hospital, and in 1832 became a Member of the Royal College of Surgeons and a Licentiate of the Apothecaries' Company. He did not enter into practice until 1834, but from a dislike to general practice became a candidate for, and was elected to, the posts of resident medical officer and superintendent of the London Fever Hospital. On the establishment of the University of London he obtained at the first examinations under the Charter the degree of M.B., and the following year that of M.D. In 1841, at the request of Mr. Skey, he consented to join him in the lectures on general Anatomy and Physiology at the Aldersgate School of Medicine, especially that part relating to the minute anatomy of muscle, skin, and mucous membranes, to which he had for some time given special attention. Shortly before the commencement of the winter session Mr. Skey was appointed lecturer on Anatomy and Physiology at St. Bartholomew's Hospital, and Dr. Goodfellow in consequence was urgently requested by the other lecturers to take the whole course, to which he reluctantly consented. About this time he translated for the *Microscopical Journal* Gruby's thesis on the "Morphology of Pathological Fluids," and on the death of the editor of that journal was appointed to fill his place. As a result of a consultation with the publisher, Mr. Van Voorst, and several persons who took a warm interest in the use of the microscope as an important instrument in anatomical investigation, it was deemed desirable to enlarge the objects of the journal and to give it a more special designation. In furtherance of this view it was published under the name of the *London Physiological Journal*, Dr. Goodfellow and Mr. Edwin Guckett, the lecturer on botany at the London Hospital, being the editors. Several important papers were published in successive numbers by Dr. Carpenter, the editors, and others. Among other papers was included one by Dr. Goodfellow on the minute structure of voluntary muscle, with careful drawings, confirming for the most part the views of Dr. Todd and Mr. Bowman. In 1840 he discovered, by $\frac{1}{18}$ object glass, moving bodies (animalculæ) in the blood of a patient suffering from typhoid fever, and sent a description of them with accurate measurements by the micrometer eyepiece to the *Medical Times and Gazette*. These bodies closely resembled, if they were not identical with, those now known as bacilli. In 1844 he was elected to the post of honorary physician to the Cumberland Infirmary, and, resigning his office at the Fever Hospital, took up residence at Carlisle. But in 1846, finding that the practice was never likely to come up to his expectations, and with a large and influential connexion in

London, he gave up the appointment, and returned to London and settled in a short time in Russell-square.

In 1847 he became a Member of the College of Physicians, and, as a remarkable fact, out of the five candidates who went in for the membership three—Dr. Stewart, Dr. Frere, and Dr. Goodfellow—soon after became attached as physicians to the Middlesex Hospital, although previously quite unacquainted with each other. In this year also he was elected physician to Aldersgate Dispensary and lecturer on Medical Jurisprudence and Toxicology at the Middlesex Hospital, and in 1849 received the appointment of assistant physician to the hospital. In 1851 he was elected to the Fellowship of the Royal College of Physicians, and on July 15th, 1858, became full physician to the hospital, and on the resignation of Dr. Seth Thompson and Dr. Crawford he was appointed lecturer on medicine jointly with Dr. Stewart. On the retirement of Dr. Stewart he gave the whole course on medicine. In 1860 he removed to Savile-row. In March, 1869, he had a threatening of paralysis. He had given his usual systematic lecture from 9 to 10, and after his morning's occupation at home returned to the hospital for his regular visit, and had given several clinical demonstrations in the wards. After being some time in the post-mortem room, while examining some diseased tissue under the microscope, he was seized with giddiness and loss of power in the left leg. In a short time this went off, and he was able to accompany his resident house physician to the female ward to prescribe for the worst cases, intending to walk home and send his butler round to countermand his engagements; but, on reaching the hospital gate, he met his carriage, and on arriving at Savile-row he found the left leg again partially paralysed. This altogether disappeared on the following day. This led him to regard it as an emphatic warning and to give up the lectureship at the end of the session, and soon after the office of physician, and gradually to withdraw from practice—a step, it is needless to say, requiring very long and anxious consideration. There is every reason to believe that to this important step, although at the cost of giving up a very lucrative practice, he owed his complete recovery and the enjoyment, with a few trifling exceptions, of perfect health up to a little over two years ago, when his life was almost despaired of, owing to an attack of influenza; he had also the great grief of losing his wife by the same disease. For some time after that attack he was in a low state—physical and mental—which led him to part with his residence in the neighbourhood of Dartmouth and remove to Paignton, where he regained his health to some extent, but he never really recovered, and passed away on the 19th ult. at the age of eighty-six.

FREDERICK ALBERT HESLOP, L.R.C.P., F.R.C.S. EDIN.

MR. FREDERICK HESLOP died on the 2nd inst., after a short and painful illness, from an attack of pleuro-pneumonia contracted in the course of his professional duties, and it seems probable that had he thought more of his own safety than of the welfare of his patients he might have escaped his fatal illness, which followed a long journey in wet clothes to a poor woman's bedside. He was devotedly attended by Mr. Vinter, his assistant, and his brother, Mr. William Heslop, who had the services of Dr. Kingsbury and Dr. Graham Steell in frequent consultation; but a constitution which was undermined by much previous sickness was no match for such a disease as his last. Frederick Heslop was the son of the late Dr. Robert Heslop, whose name was so honourably associated with the early days of St. Mary's Hospital, Manchester; and his uncle, Dr. Ralph Heslop, was one of the leading practitioners in Preston. He himself gave much promise of a brilliant career. He was one of the surgeons to the Blackpool Hospital and had a seat on its board. He also filled the post of surgeon to the police force and to the fire brigade of Blackpool, and was an examiner for the St. John Ambulance Association, in whose work he took the keenest interest. He had recently been president of the Fylde Medical Society. Cut off at the early age of thirty-seven, he leaves a widow and three children. Mr. Heslop had won the esteem of his medical brethren by his many good qualities; he was a trusty friend, sincere and straight, and his short life had been long enough to gain him the respect of his townsmen and to set an example of unselfish devotion to duty. The profession is not lacking in illustrations of the dangers of its members, or their willingness to meet them, and the name of Frederick Heslop may fairly claim a place in the list of medical martyrs.

THE BRITISH MEDICAL ASSOCIATION.

MEETING IN LONDON.

THE SECTIONS.

MEDICINE.

FRIDAY, AUG. 2ND.

The Causes of Acute Rheumatism, and its Relation to other Affections.

Dr. CHEADLE, consulting physician to the Children's Hospital, Great Ormond-street, introduced the discussion on this subject in an able and exhaustive paper, with the main conclusions of which the majority of subsequent speakers agreed. He laid stress on the fact that it is a general disease, of which arthritis is but one of many symptoms. The diseases which are regarded as rheumatic were then reviewed as purpura rheumatica, subcutaneous nodules, endocarditis, and chorea. The cardiac affection of chorea was probably rheumatic, it being organic, and endocarditis being the most constant change in fatal chorea. Pericarditis and endocarditis were almost exclusively rheumatic, and so were the exudative erythemata. Rheumatism was the only general disease having an association with chorea, except scarlet fever; and scarlatinal chorea and endocarditis were almost certainly rheumatic, as was also the chorea of pregnancy. The general argument in favour of the rheumatic nature of chorea was very strong, as the alternation of the two diseases in successive members of the same family shewed. The seasonal and annual curves of prevalence of the two diseases were identical, as shown by Lewis in Philadelphia and by Newsholme in London. The association of various phenomena, such as endocarditis, chorea, erythemata, and subcutaneous nodules, formed a diagnostic feature of rheumatism. Subcutaneous nodules almost disappeared with the advent of puberty; and chorea and endocarditis similarly became less common with advancing age. If the picture of rheumatism had been drawn from its manifestations in childhood arthritis would not have been taken as its characteristic phenomenon. In addition to the direct morbid agent producing rheumatism certain other factors were important. Chill was a common factor, though not a constant one. Rheumatism appeared to prevail most in winter and spring. Dr. Newsholme's exhaustive researches, given in the Milroy Lectures this year, showed that it was most prevalent in dry seasons associated with a low subsoil water and an unusually high soil temperature. This was not incompatible with the action of chill as a factor in the disease. The influence of hereditary tendency had been underrated rather than overrated, and could not be explained by the influence of locality or personal association. Evidently some general systemic influence was at work in producing rheumatism. This was a toxæmia rather than a neurosis. The toxæmic agent was not uric acid (Haig) or lactic acid (Prout), or these together (Latham). The arguments in favour of a micro-organism invasion had been forcefully given by Dr. Newsholme. All the varied phenomena of the disease suggested an infective disease. It was objected to this view that there was no exact period of incubation, that the evidence of direct infection was rare and doubtful, that the specific organism had not been discovered, and that the disease had not been produced in man by inoculation. The organism would probably be found to be analogous to that of pneumonia, tetanus, or tubercle, rather than to those of the more infectious diseases.

Sir DYCE DUCKWORTH accepted the infective theory to a modified extent, having somewhat changed his views on this point. It did not, however, explain all the productive factors of rheumatism. Probably the exact proof of the infective theory would be shortly forthcoming. Other factors were required. A diathetic disposition is necessary, which is transmissible from parent to child. This affords a soil for the disease. It is probable that some persons never could have rheumatism. It was only predisposed persons that, under conditions of lowered vitality, became the prey to some micro-organism which germinates in the blood, developing a toxine therein.

Dr. A. GARROD remarked on the absence of foundation on which the lactic acid theory stood. The synthetic evidence of Richardson and Foster was equally dubious. There could

be little doubt as to the infective nature of the disease; but the long continued course, and the way in which the disease crops up like malaria, were more analogous to syphilis than to an acute infectious disease. He suggested that chorea might be due to a poison produced by the rheumatic fever organism and thus be analogous to post-diphtheritic paralysis. The temperature curve of rheumatism varied with the local manifestations. There was no definite temperature curve even when salicylates were not given.

Dr. A. MANTLE referred to his paper on the Bacterial Origin of Rheumatic Fever published nine years ago. He quoted interesting instances of multiple cases in households, and of the association of the disease in the same house with scarlet fever, &c. Erythema nodosum he regarded as a distinct disease. He quoted Trousseau as thinking it was no more a variety of rheumatism than smallpox was of ecthyma. He had found cocci and bacilli in the joints and blood-serum of patients.

Dr. NEWSHOLME entered a preliminary objection against the use of the term "acute rheumatism," as this appeared to imply that chronic rheumatism was a variety of the same disease. It was a pity that the use of the word "rheumatism" for chronic troubles was continued. He maintained that clinical, pathological, and therapeutical considerations were strongly in favour of the view that rheumatic fever was a specific febrile disease. He had in the Milroy lectures collected evidence of the excessive prevalence of the disease at intervals of a few years. This evidence was based on hospital experience and death returns in this and other countries, and on the compulsory notification of all cases of rheumatic fever for thirty-three years in Scandinavia. In this country 1868, 1874-5, 1884, and 1888 were years of great epidemic prevalence. A comparison of the curve of prevalence of the disease in Christiania with that for the whole of Norway indicated a gradual spread of the disease. From ground water observations at Croydon and Brighton it was clear that the commonly asserted association of damp soil with rheumatism did not hold good. Rheumatic fever in these towns was always small in amount in years in which the ground water was high, and was usually excessive in amount in the years in which the ground water was low. Observations in London also showed that the four-foot earth temperature was exceptionally high in the years in which rheumatic fever was unusually prevalent. It remained for further observations to confirm or refute the above, but until a complete notification of all cases was obtained our knowledge of the natural history of rheumatic fever must necessarily continue imperfect.

Sir T. GRAINGER STEWART thought that the proper attitude of mind was one of suspense until the specific micro-organism of rheumatism was discovered. He attached no importance to the earlier work on the experimental pathology of rheumatism, and considered that the trend of facts was in favour of the specific febrile character of rheumatism. He supported Sir Dyce Duckworth's statement that a variety of morbid conditions were now included under the common name of rheumatism, and thought that differentiation was required as in the analogous case of diabetes. He was of opinion that rheumatism began as a local disease, and might remain so for days before infecting the whole system, giving an instance of rheumatism in the elbow-joint caused by prolonged leaning out of a carriage window, which only after several days spread to other joints. The practical rule was not to neglect local rheumatism.

Dr. H. HANDFORD was of opinion that any satisfactory explanation of the pathology of rheumatism must explain the affections closely allied to it. He instanced cases of rheumatoid arthritis beginning acutely, and only distinguishable from rheumatic fever by their refractory character. The progressive character of certain cases of endocarditis after the acute disease ends was not satisfactorily explained on a pure bacillary theory.

Dr. A. HAIG defended the view that rheumatism is due to the excessive introduction into and retention of uric acid in the system. This was unlike Dr. Latham's view, which implied the increased production of uric acid in the system. Sir A. Garrod's observation that no uric acid is found in the blood in rheumatic fever led him (Dr. Haig) to the opposite conclusion to that usually drawn from this supposed fact, as the uric acid had got into the joints. The bad effect of meat on rheumatic fever convalescents was explicable on the grounds that uric acid was thus introduced, and the salts of meat diminished the elimination of uric acid.

Dr. STEPHEN MACKENZIE agreed with Dr. Cheadle in shifting the standpoint of rheumatism from the adult to the child, and in regarding it as no mere arthritis. Referring to the point of nomenclature raised by Dr. Newsholme, he agreed that acute rheumatism was objectionable as connecting it with chronic rheumatism, and thought that objection might be taken against any other name. He pointed out that in several other microbic diseases no microbe had been found. The local commencement of symptoms emphasised by Sir T. Grainger Stewart did not necessarily imply a local origin. If Dr. Haig's view was to be accepted he could not understand the inefficacy of salicylates in gout or the infrequent concurrence of rheumatism and gout in the same person. He regarded chorea as essentially rheumatic. The non-effect of salicylates did not negative this view, as the same applied to exudative erythemata. The difference between the tissues affected might explain this.

Dr. D. B. LEES believed that erythema nodosum was a distinct disease, as much as scarlet fever or measles, having a definite eruption and duration, and, from his experience, no second attacks. The occasional loss of knee-jerk in chorea was not explicable on the neurotic or fright theory. It was probably due to a blood poison and analogous to the loss of knee-jerk in diphtheria. There was further evidence of a blood poison in the acute dilation of heart seen in pericarditis, which, in the light of Gaskell's researches, was probably not due to the pericarditis itself. He suggested the analogy of diphtheria and of tetanus, in which a local multiplication of micro-organisms occurred, and a general poisoning of the system by a toxine. If so it might be possible to attack rheumatism locally in the throat.

Surgeon-Lieutenant LONGHURST thought that constitutional considerations were in danger of being overlooked and could not accept the germ origin of rheumatism. He had observed rheumatism in India and Africa, and had not seen it in warm and dry climates, but it developed after a few days of fog and rain. Statistics were, in his opinion, misleading, because they did not take into account the waves of atmospheric influence.

Dr. CHEADLE, in replying, said that he had given large doses of lactic acid to patients, but with negative results. He could not agree that erythema nodosum was a disease distinct from rheumatism. He agreed with Dr. Newsholme's objection to the use of the phrase "acute rheumatism," but thought that a new term was desiderated. He was much interested in the evidence of slow spread of the disease in Norway, whether this meant personal infection or infection of localities. The refractory cases mentioned by Dr. Handford probably had a different pathology to rheumatism. Unlike Dr. Lees he certainly had seen the coexistence of rheumatic fever and erythema nodosum.

SURGERY.

THURSDAY, AUG. 1ST.

The Treatment of Ulcers and Alopecia by Oxygen Gas.

An interesting series of cases were exhibited on Thursday in Room No. 30 of King's College by Mr. George Stoker, illustrating the effects of the local application of oxygen. In all the cases the disease had existed for a long time and had resisted every other method of treatment. The general mode of application was by enveloping the part affected in an indiarubber bag modified in shape according to the portion of the body to be covered. This bag was supplied through an indiarubber tube from a larger bag, which latter was filled once in twenty-four hours and acted as a reservoir to supply the other by its own elasticity. When the surface of the skin was broken the oxygen was mixed with an equal quantity of air purified by passing it through a solution of permanganate of potash and chloride of calcium. When applied to an unbroken surface, as the head for alopecia, pure oxygen was used. The cases included: 1. a woman seventy-one years of age with a large callous Ulcer of the Leg. Every available method of treatment had been tried, including antiseptic dressing and rest in bed, for more than three years, but without success. Treatment by oxygen was commenced six weeks ago, and the ulcer was rapidly healing, although the patient was the subject of Bright's disease. 2. A case of thirteen Ulcers of the Leg which commenced four years ago after an attack of typhoid fever. They had varied in size from a sixpenny piece to 2½ in. by 1½ in. in diameter. After three months' treatment by oxygen they had completely healed. 3. An epileptic patient, a girl aged eighteen, who had incurred a severe burn all across the upper part of the back nine

months ago. After the first few weeks the healing had come to a complete standstill, in spite of six months' treatment in a London hospital. Nine weeks ago the ulcerated surface measured 11 in. by 9 in. During this time it had been kept continually bathed in a mixture of equal proportions of oxygen and purified atmosphere by the knapsack apparatus, and it now measured 5½ in. by 3 in. Two cases of Alopecia, one very successful, and the other doubtfully so, were shown and are mentioned in our report of the Dermatological Section.

FRIDAY, AUG. 2ND.

The Anastomosis Button.

Dr. MURPHY (Chicago) gave a demonstration on the dead body of the method of using the button devised by him. He commenced by saying that seven points required attention in attempting to obtain union between two pieces of bowel. They are: (1) coaptation of surfaces, and the union should be between similar tissue—that is, the muscular coat should join the muscular coat, and the mucous membrane of one portion should be in contact with the mucous membrane of the other; (2) adhesions should form immediately; (3) sufficient calibre should be left at the point of union; (4) permanent organised adhesions should result; (5) the line of union must not contract to any great extent; (6) the process should be aseptic; and (7) the method employed should take the least possible time. He further pointed out that two sets of arteries supply the bowel—firstly the branches of the mesenteric arteries; and secondly, the "parallel artery," which runs along the mesenteric border of the bowel. Of these two sets the parallel artery is the more important for the life of the bowel, for the mesenteric branches may be tied for a length of bowel equal to seven inches without any sloughing resulting, while the parallel vessel cannot be tied for more than half an inch without causing sloughing. Hence it is necessary in dividing the bowel to remove less of the mesenteric border than of the convex side. In taking the running stitch round the bowel it is important to make an overstitch at the mesenteric border in order to secure the parallel artery. The method was demonstrated both for end-to-end anastomosis and for lateral anastomosis. The application of the method to resection of the rectum was also shown.

The Results of Operative Treatment of Injury or Disease of the Cervical Vertebræ.

Mr. VICTOR HORSLEY read a paper on this subject. The cases on which the paper was based were seven in number, and in each laminectomy had been done for caries or for fracture. All the patients recovered. Case No. 1 was admitted to hospital in 1888 with caries of the atlas and axis. There was complete paralysis of all four limbs, and the skin was dusky from interference with respiration. The arches of the atlas and axis were removed. Power began to return on the sixth day. The patient is now well except for some wasting of the interossei. Case No. 2.—There was caries of the fifth and sixth cervical vertebræ, weakness of the intercostal muscles and of the lower limbs. There was no sensory paralysis. Laminectomy of the affected vertebræ was performed, and the patient recovered. Case No. 3.—There was caries of the lower cervical vertebræ, with complete paralysis in the legs and right arm, and a little power in the left arm. The vesico-rectal centre was interfered with. Laminectomy of the third to seventh cervical vertebræ was performed. On the third day some return of power was noticed, but this was only ephemeral, and very little further progress was made. Three months afterwards the patient left the hospital, and a month later died. Case No. 4.—There was fracture of the cervical spine, with paralysis of all four limbs, which had lasted eight months. The paralysis began to extend. Analgesia was present, and this always points to an affection of the central grey matter of the cord. The laminæ of the fifth and sixth cervical vertebræ were removed, and the thick fibrous tissue was dissected off the dura mater. The patient steadily improved, and only wasting of the interossei remained. Case No. 5.—The patient had fallen from a cart, striking his head and right shoulder. He walked about for a week, but gradually lost power in all his limbs. When admitted to Queen's-square Hospital fracture of the sixth cervical vertebra was diagnosed. The left optic disc was swollen. Laminectomy of the fourth, fifth, and sixth cervical vertebræ removed a ridge which had been pressing on the spinal cord. Power began to appear on the twelfth day. He has since recovered completely. Case No. 6.—The patient sustained a fracture of the sixth cervical vertebra; the onset of paralysis was gradual. There was marked contracture and well-marked anæsthesia of the post-axial border of the upper limbs. The arches of the sixth and seventh cervical vertebræ were removed when a projecting ridge was felt, but on extension this disappeared. He is recovering slowly. Case No. 7.—The patient had struck the fore part of his head and after walking 200 yards rapidly became completely paralysed. After partial recovery spastic paraplegia appeared, with post-axial anæsthesia of the upper limbs. The laminæ of the sixth and seventh cervical vertebræ were removed. Permanent recovery commenced three weeks after the operation. He can now walk a mile. In many of these cases there was an ephemeral recovery followed by a return of the paralysis, this probably being due to œdema arising in the cord.

Sir W. MACCORMAC wished to know how one could distinguish between cases suitable for operation and those which would recover without operation.

Sir WM. STOKES (Dublin) asked why removal of the laminæ should relieve caries which affected the bodies of the vertebræ.

Mr. NOBLE SMITH asked at what stage of caries should an operation be performed. He remarked that a large number of cases recovered from paralysis in caries of the spine without any treatment. Mr. C. B. Keetley had operated in one case of fracture of the spine, but the patient died, and the cord was found to be completely divided. In a case of caries in which he had operated with a satisfactory result he was not inclined to attribute the result to the operation. He thought extension was of great value.

Mr. DAMER HARRISSON (Liverpool) also thought that extension was of great value.

Mr. FREER (Birmingham) considered it very difficult to decide when to operate.

Mr. MAYO ROBSON said he had operated in one case for fracture. The patient had previously been operated on by him for caries. Recovery was very partial. He thought that operative interference was very seldom needed.

Mr. HORSLEY, in reply, said that complete vaso-motor paralysis and entire loss of deep reflexes showed complete division of the cord. In an ordinary case extension should be tried for six or eight weeks. Laminectomy relieved caries because there was always a thickening over the dura mater, which was a source of pressure. In some cases the reason for operating was impending asphyxia.

Mr. C. A. MORTON (Clifton) showed a specimen in which lateral intestinal anastomosis had been performed three months before death. The cause of the operation was malignant disease of the cæcum.

Mr. MAYO ROBSON (Leeds) read a paper on a series of cases of Colectomy. In four of them he had employed the bone bobbin and in one Murphy's button. Two of the cases were operated on for malignant disease of the bowel and three for fibrous stricture. He preferred the bone bobbin to the button, and with it he used the continuous suture.

Mr. GREIG SMITH was of opinion that when a typhlotomy was performed for acute intestinal obstruction the colectomy should be made a part of the first operation by bringing the growth outside the abdomen and passing skewers underneath it. A few days later the growth could be removed without an anæsthetic.

Dr. KEEN, Mr. G. HAMILTON (Liverpool), and Mr. H. ALLINGHAM having spoken,

Mr. HARRISON CRIPPS said he preferred not to do too much at once; of four cases recently of resection of the bowel in which Murphy's button was used all died.

Professor MACEWEN (Glasgow) said he had never tried anything but stitches, and at present he still preferred to use stitches.

Mr. MAYO ROBSON, in reply, said that in acute intestinal obstruction immediate relief was the chief thing.

Complications occurring in Inguinal Colotomy.

Mr. HARRISON CRIPPS read a paper on this subject. There was often some difficulty in finding the bowel; the best method was to pass a finger along the brim of the pelvis, and, if necessary, have some water injected into the bowel at the same time. Occasionally it happened that there was no sigmoid meso-colon; in this case the bowel could not be brought up to the abdominal wall; the operator could close the wound and open the cæcum or the ascending colon; or he might stitch the

parietal peritoneum to the bowel wall, or turn up peritoneal flaps from the bowel and attach them to the parietes. Prolapse is nowadays rare, as more bowel is drawn out. The incision should be high up—as high as the level of the umbilicus. If undue contraction occurs, a spring dilator is the best instrument to use.

Mr. W. ANDERSON read a paper on three cases of Sacless Herniæ of the Sigmoid Flexure through the Left Inguinal Canal, with an anatomical specimen. Two of the cases were oblique and one direct. The bowel was covered on the concave side by peritoneum. Attempts at radical cure were not very successful.

Mr. L. BIDWELL said that he had had a similar case in which strangulation had occurred. He attempted to form a mesentery for the sigmoid flexure, but the bowel sloughed and a fæcal fistula formed.

Mr. W. D. SPANTON read a paper on three cases of Splenectomy. One of the cases recovered. In the two fatal cases a large amount of blood was found in the abdominal cavity. He had drawn up a table of all recorded cases of the operation, and among the conclusions arrived at were these: (1) that it is never justifiable for leucocythæmia, as there is a mortality of 96 per cent.; and (2) that the mortality has been steadily diminishing, for from 1865 to 1875 the mortality was 80 per cent., during the next decade it was 51 per cent., and during the last ten years it had fallen to 19 per cent.

Mr. C. CATHCART (Edinburgh) demonstrated a simple form of Exhaust Pump for use after supra-pubic cystotomy.

PSYCHOLOGY.

FRIDAY, AUG. 2ND.

Epilepsy and its Relation to Insanity.

Dr. GOWERS in opening this discussion pointed out that the knowledge needed for the discernment of the relation between the two diseases can only be obtained from the side of insanity, although what information it is that is wanted can be only clearly perceived from the side of epilepsy. To supply it, however, associated effort is necessary. Restricting the question to insanity and idiopathic epilepsy, both maladies must be regarded as affections of the cortex of the brain, although we have no knowledge of the changes which underlie them; but if the recent progress in histology and physiology can be trusted we have not yet looked in the right place. Attention has been fixed on the nerve cells, but it is in the spongy grey matter between the cells that the affections must arise. Here we have not yet reached the recognition of normal structure, much less of pathological change. Hence our present study can be only clinical. The hereditary relationship between the two diseases has yet to be worked out from the side of insanity, and this is one of the questions most urgently needing combined effort. The frequency with which insanity can be traced in the families of the epileptic is approximately known; all facts, however, regarding inheritance are below the truth. It is interesting to note that in the series of 1450 cases analysed for the first edition of "Epilepsy" inheritance was traceable in 35 per cent., but in another series of almost the same number, recently analysed for a forthcoming edition, the percentage rises to 44·5 per cent. This is because a larger proportion of the cases were seen in private, and in them the facts of heredity can be far more certainly obtained. When these private cases are separately considered the proportion of heredity rises to 48·4 per cent., so that at least one-half the cases of epilepsy are inherited. This shows the importance of discriminating the source of information in the facts regarding insanity in each series; the inherited cases, considered separately, furnish, as would be expected, the same proportion of cases of insanity in the family. It was met with in one-third. Epilepsy existed alone in two-thirds. No information can be given regarding the character of the epilepsy in cases with insane heredity, but far more important is the information which should be forthcoming from asylums regarding the cases of insanity in which there is a family history of epilepsy. Post-epileptic mania was then considered as replacing in men the post-epileptic hysteroid convulsion of women and young males, and the question discussed whether such mental disturbance does not sometimes replace an attack. This is suggested by the peculiar and elaborate mental warnings which sometimes occur, and which show how complex may be the initial process of the fit. Another important relation is the occurrence of an attack of insanity in the course of epilepsy. Here, again, we are quite without definite information, and it can only come from asylums. It seems probable that such transient insanity is most common in patients with a complex mental aura, but the facts cannot be discerned from the side of insanity, because the attack withdraws the patients from observation and they are generally not seen again. Indeed, the chief object to be obtained by the discussion was to awaken attention to the need for a joint attempt to ascertain facts. Such an attempt could only be made by the appointment of a committee to receive information and to obtain it by definitely indicating the facts that are needed. The questions involved are of great importance both socially and medically, and warrant a deliberate effort to secure the knowledge which no one person can obtain, and which, moreover, can only be obtained in the main from the alienistic side, but only in its completeness, by the coöperation of those under whose notice each class of diseases comes.

Dr. FLETCHER BEACH expressed his concurrence in Dr. Gower's views, especially concerning the difference in the statistical data from different social classes and referred to the difficulty experienced in eliciting facts concerning heredity in the lower classes. He did not think that heredity, by itself, was sufficient to produce epilepsy or insanity. He was of opinion that this result was due to the coöperation of many factors. He thought much good could be achieved by a more frequent conference between alienists and general physicians. Much valuable information could, and he hoped would, be obtained by devising some mode of coöperation.

Dr. HYSLOP thought we were in danger of making our notion of epilepsy too wide and too vague, so as to include every condition in which there is a sudden or explosive physical or psychical action. He wished to ask what is really meant by the term "epilepsy," and observed that there is a great difference between epilepsy and what are called "epileptiform attacks." At present the former term was used much too loosely. He also remarked on the difficulty he had in understanding Dr. Hughlings Jackson's views of the nature of epilepsy, and confessed that he could hardly grasp their signification.

Dr. MERCIER referred to the epileptics in asylums, many of them cases of a class comparatively rare outside asylums—cases of *petit mal*, cases in which the fits are preceded by elaborate aurræ or followed by elaborate automatic actions. The great importance of the subject was shown by the fact that 1300 epileptics were annually admitted into the asylums of England and Wales. He suggested that Dr. Gowers might assist the asylum physicians by indicating the lines upon which such an investigation as he suggested might be carried out

Professor BENEDIKT (Vienna) referred to a class of cases which are in reality epileptic, but which are not recognised as such. Their manifestation consists of a psychosis, such as a fit of passion. They are very rare, and only occur under special circumstances. He then made a few remarks about epileptics who are the subjects of sexual perversions.

Mr. CONOLLY NORMAN said that he had seen several cases of epileptic mania in women, and was surprised that Dr. Gowers had not. Excellent descriptions of the mental states in epilepsy abound in memoirs in the psychiatric journals, as the papers of Sanders in Germany and Howden in this country. He also referred to the difficulty of obtaining the histories of patients admitted to the large asylums in this country, the patients themselves being of course frequently unable to give any account of themselves.

Dr. HUGHES (St. Louis) referred to the interest and importance of this subject, and was of opinion that observation had proved the unvarying kinship between all epileptoid states. He cordially eulogised the researches of Dr. Hughlings Jackson as to their effect in elucidating the various phenomena of epilepsy, especially those occurring in the obscure forms of *petit mal*.

Dr. JAMES TAYLOR referred to the influence of drugs on epilepsy and the possible relation of variations in the mental condition to the drug administered and the dose of the drug.

Dr. NICOLSON (Broadmoor) also spoke.

Papers.

Dr. BONVILLE FOX next read a paper on a Medico-legal

Case, illustrating the anomalies and absurdities of the law as at present administered, more especially in regard to the application of the "knowledge of right and wrong" test.

Dr. WEATHERLY, Dr. MERCIER, and others spoke.

On Morbid Doubt.

Dr. HARRY CAMPBELL read a paper on Morbid Doubt. He related several cases of such doubt arising in the mind—e.g., as to whether a certain act, such as posting a letter, had been done or not. In its extreme degree such morbid doubt became almost, if not actually, insanity.

Dr. WEATHERLY thought this was merely an exaggeration of the ordinary feeling of doubt as to whether a certain act had been done or not.

Dr. HUGHES (St. Louis) regarded its persistence as the characteristic of morbid doubt, and was not inclined to regard the instances of Dr. Weatherly as true examples of morbid doubt.

Dr. CLIFFORD ALLBUTT had seen numerous cases of the slighter forms referred to, and he was not inclined to attach much significance to them. He certainly knew instances of patients who for years had been troubled with the doubt referred to by some of the speakers—e.g., as to having locked a door &c.—and this he felt sure did not necessarily indicate even a danger of insanity.

Fractured Ribs in the Insane.

Dr. A. W. CAMPBELL read a paper on a Comparison between the Breaking Strain of the Ribs of the Sane and the Insane. He finds as a result of experiment that the breaking strain of ribs in the insane is but very slightly different from that in the sane. On the other hand, the average breaking strain of the ribs of those dying from chronic and wasting disease is lower by about 6 lb. than that of patients succumbing to some chronic but not wasting affection; while the average breaking strain in the latter case is less than that in patients dying from acute disease or accident. In general paralysis, however, the breaking strain is about 20 lb. below the normal standard. In both sane and insane there are cases in which the ribs possess an exceedingly low breaking strain. In such there are either architectural defects or the density and elasticity are diminished as a result, probably, of chemical changes due to defective assimilation.

Dr. C. H. BOND next read a paper on the Relation of Diabetes to Insanity. He remarked on the interest of this question to the general physician, the neurologist, and the alienist. It has been denied that glycosuria is of frequent occurrence in the insane. This is true if all cases are included; if only recent ones are, it is probably not. In 175 cases the urine was examined soon after admission and frequently afterwards. In twelve instances sugar was found, and of the twelve, six were melancholics; indeed, mental depression existed in all. An insane heredity was present in more than half the cases. Four chronic female cases are also described in whom diabetes developed during their residence at Banstead. Three of them died and a full account of the necropsies was given. In all the cases a marked history of previous alcoholic excess was notable. The question of the inter-relation of psoriasis, insanity, and diabetes was also alluded to.

Voluntary Boarders in Asylums.

Dr. PERCY SMITH read a paper on this subject. Admitting patients as voluntary boarders in asylums had grown largely of late. The most important restriction is that the consent of the Commissioners in Lunacy must be obtained in the case of a private asylum. The following were instanced as suitable cases for such provision: (1) recurrent cases; (2) cases of mild melancholia; (3) patients with homicidal feelings, distrustful of their own self-control; (4) cases with maniacal excitement after epilepsy; (5) early cases of general paralysis; (6) some cases of partial weak-mindedness; (7) cases of drug habit or alcoholism; (8) patients with hallucinations; (9) patients wishing to remain for convalescence; and (10) certain classes of patients, especially medical men or nurses. Patients may simulate the milder varieties of insanity to enjoy the comfort of an asylum. To obviate this, great care is necessary with histories. There is at present no arrangement for admission of voluntary boarders of the poorer classes to county asylums, and it is worth consideration whether some provision of this nature is not desirable. Dr. Percy Smith also gave an account of his own procedure in regard to applications for admission as voluntary boarders.

The Law in Relation to Single Patients.

Dr. L. A. WEATHERLY read a paper on this subject, in which he pointed out the curious discrepancies that exist between the law and the practice, especially as to the presence of two or more patients in a private house and the inadequate provision for supervision of their treatment. He suggested that the best way to provide for such cases was—(1) to educate the public to recognise that insanity is no crime, but a disease; (2) that in cases in which certification would be difficult it should be insisted upon that a report be sent to the authorities stating that A B has been placed in a certain house for care and treatment, but that the unsoundness found is not sufficient to admit of certificates being signed; and (3) that to admit a proper supervision of all these cases, district officials should be appointed to act, as it were, as subcommissioners. Such a system would then form a most useful adjunct to the system of asylums.

Dr. HAYES NEWINGTON and Dr. DOUGLAS also spoke as to the imperfections and anomalies of the present system.

The work of the Section was brought to a close with a cordial vote of thanks to the President, proposed by Dr. HAYES NEWINGTON and carried by acclamation.

PHARMACOLOGY AND THERAPEUTICS.

FRIDAY, AUG. 2ND.

The meeting was presided over by Dr. MITCHELL BRUCE, and subsequently by Dr. MCHUGH. The first part of the proceedings was occupied by papers on the therapeutic value of the waters of various spas.

Dr. FORTESCUE FOX (Strathpeffer) read a paper on the Therapeutic Uses of the Waters of Strathpeffer Spa. The waters were most useful in the treatment of conditions occurring during middle life. Caution was necessary in the use of the sulphur waters, which, if long continued, might produce anæmia. The waters were contra-indicated in all acute febrile states, in acute congestion or inflammation of the viscera, in acute rheumatism and tuberculosis, uncompensated heart disease, and albuminuria. The use of the waters seemed to be the remedial factor in spa treatment, change of air, scene, diet, and surroundings being insufficient to account for the great benefit received in so many cases of chronic disease.

Dr. S. HYDE (Buxton) read a paper on the Therapeutic Value of the Waters of Buxton. After referring to the variety of waters occurring at and around Buxton—saline, sulphur, and ferruginous—the cases suitable for the treatment were discussed. Subacute rheumatism was especially likely to be benefited. Although at first the treatment usually brings about a return of the acute symptoms, these are of short duration, and rapid progress towards recovery quickly follows, a large number of patients being completely cured. In acute gout the internal use of the waters is alone indicated, but in chronic gout the use of baths in addition is most useful. In rheumatoid arthritis the combined internal and external treatment together with massage gives satisfactory results. Massage is a valuable adjunct in many conditions, but electricity is not particularly beneficial. The treatment yields good results in many other conditions—lumbago, peripheral neuritis, and certain skin affections, particularly those dependent upon gout. The remarkable effects produced by the *natural* mineral springs was next commented upon, and it was pointed out that however closely an artificial water, prepared synthetically, resembled a natural one, the former was lacking in some peculiarly subtle properties which gave the "character" to the natural water and rendered this much more efficient in therapeutic value. The conditions of change of life and surroundings accompanying treatment at a spa were not sufficient to explain the benefits received.

Dr. A. S. MYRTLE (Harrogate) alluded at the commencement of his paper on the Therapeutic Value of the Waters of Harrogate to the fact that there was some property in natural springs which was lacking in artificial waters, however closely they resembled the natural. He considered that strict dieting was unnecessary while undergoing the treatment; patients might have anything in reason, food and drink, provided it did not disagree and was taken in moderation. He was in the habit of recommending for breakfast "any-

thing you like, but not too much of it"; for lunch, ditto; and for dinner, ditto. The sulphur waters were the only ones used externally, the sulphuretted hydrogen contained in them being sedative in nervous conditions and in affections of the gastric and bronchial mucous membranes. The other waters were stimulant, diuretic, and tonic. In chronic cardiac diseases the waters were most useful if used with care.

Mr. W. TOMLINS (Droitwich) read a paper on the Brine Baths of Droitwich. After referring to the large amount of saline constituents which these waters contain and quoting analytical figures, the cases suitable for the treatment were discussed. In conclusion, attention was drawn to the attractiveness of the scenery and to the favourable climatic conditions of Droitwich.

Dr. PARSONS referred to the value of spa treatment in diabetes and other diseases.

Dr. CUFFE and others also took part in the discussion.

Dr. HERBERT SNOW read a paper on "Loretin," an organic iodine compound discovered by Claus of Freiburg, and possessed of antiseptic properties. Loretin is a yellow crystalline powder, but slightly soluble in water, and forming emulsions with ether, oil, and collodion. It forms neutral salts with alkalies, which are freely soluble in water. Loretin is odourless and non-poisonous, and greatly superior to iodoform in germicidal power. It is also a most efficient deodorant, almost instantly annulling the fœtor of sloughing cancerous sores. Dusted into deep wounds, it completely precludes subsequent suppuration, and no bad symptoms had been observed after its use. Applied to the skin or to a granulating sore it is perfectly unirritating.

Dr. F. R. WALTERS read a paper on the Subcutaneous Use of Guaiacol. When injected under the skin guaiacol was found to be very irritating and producing sloughing. Injected into the muscular tissue the irritating properties were less marked, and considerable doses could be administered without constitutional disturbance.

Dr. DE BACKER (Paris) read a paper on the Treatment of Tuberculosis by Living Ferments. Yeast species are made use of and are injected in the living state subcutaneously. They are said to act therapeutically by a sort of phagocytic action.

LARYNGOLOGY AND RHINOLOGY.

WEDNESDAY, JULY 31ST.

The Etiology of Mucous Polypi of the Nose.

Professor GAYE (Amsterdam) opened a discussion on this subject. He had been unable, he said, to demonstrate any causation in the majority of his cases of nasal polypi, but he had in other cases seen and proved them to be originated by fetid ozæna, rhinoliths, and empyemata of the accessory cavities, but he thought chronic catarrh, irregular septum, and habitual mouth-breathing might have a bearing on the etiology of the complaint. He finally alluded to the possibility of climatic influences, giving as an example a place in Holland where nasal polypi were said by the inhabitants to be unusually prevalent.

Dr. LUC (Paris) maintained that the causation of nasal polypi by empyemata of the antrum and other accessory cavities was far from being a frequent one. His chief criticism of Woakes' views was the entire absence of clinical proof by that authority. He considered von Zeim's work to have been very beneficial to nasal surgery. Myxomatous degeneration was the form of middle meatal response to constant irritation, and drew attention to folds of the mucosa as being an etiological factor in nasal polypi. Chronic catarrh and bone lesions were occasional causes, but many of the growths were of spontaneous origin.

A paper by Professor ZUCKERKANDL of Vienna was read on this subject. He said the majority of writers agree that the polypi and polypoid hypertrophies of the nose were not really neoplasms, but inflammatory hypertrophies due to a chronic local inflammation. He gave as proofs of this: (1) the constant presence of round-celled infiltration in the growths; (2) the presence of other inflammatory changes at the base; (3) that polypoid hypertrophies develop into polypi; (4) polypi can be caused by the presence of a rhinolith; (5) there is no sharp line between polypi and normal tissue; (6) their tendency to recur; and (7) the absence of congenital polypi. Polypoid hypertrophies of the lower turbinated bones might be called polypi, as they have equally with those of the middle meatus the same characteristics and the same causation. He severely criticised Woakes' theory of ethmoiditis, remarking that syphilis and allied conditions were the probable originators of the necrotic conditions; he had examined all available bases of polypi and polypoid hypertrophies, and never found them necrotic, but, on the contrary, especially at the edges of the ostium maxillare, a new bony outgrowth was apt to arise.

Dr. P. MCBRIDE commenced his paper by a graphic description of nasal polypi. He said most observers considered nasal polypi to be simply œdematous fibromata; he alluded to the so-called papilloma of the inferior turbinated bones which he described as similar to polypi of the upper tracts. As to the etiology he put forward the view that a small vascular loop of inflammatory products caused a projection of the mucous membrane, which hung down, and which became polypoid from the action of gravity. This would, however, only account for a part of the growths. Empyema of the antrum accounted for many of the growths; and it was by no means improbable that a faulty histological condition was sometimes present which predisposed the individual to the disease. He thought Woakes' theory was not substantiated, nor did he quite agree with Grünwald; his statement was too broad. In his own tables he found males to be the most frequent sufferers, and the ages of twenty to thirty to be the most usual time of life to find these growths

Dr. HODGKINSON was not able to add much that was new. Empyema of the accessory sinuses was not uncommon in connexion with these growths; caries of the ethmoid could not be considered as a usual accompaniment of polypi. We were, therefore, rather left to a predisposition theory.

Professor SCHMIDT (Frankfort) was inclined to attribute polypi entirely to inflammation of the mucosa and subjacent tissues by reason of some form of irritation.

Dr. SCANES SPICER quite agreed that hypertrophies of the middle and lower turbinated bone were of the same variety of tissue &c. He was not inclined to refuse Woakes' theory altogether, and he thought a great deal of the views expressed were from a faulty reading or interpretation of that author. The term "ethmoiditis" was an inclusive term including all the other tissues as well as bone, and in this disease necrosis was rare. He thought that whilst empyema of the antrum sometimes caused polypi sometimes the reverse was the order of things.

Dr. WM. HILL said the causation of these growths must be sought in irritation and inflammation of the mucous membrane. More than 50 per cent. of his own cases had been unassociated with either bone or antral disease. He drew attention to the similarity between nasal and aural polypi in regard to their being always connected with bone lesion in the nose and also that they were both lying bathed in moisture. He classified these growths into two varieties clinically: those cases in which pus was present and those in which it was absent, the latter being the more easily curable cases.

Dr. BOSWORTH (New York) had founded, on his own experience, the theory that the origin of nasal polypi was due to mucoid degeneration of the mucosa, primarily in the ethmoid cells, and as it increased in amount it was, as it were, squeezed out in the polypoid form as honey was when pressed out of the comb. The starting point of polypi is some inflammatory process.

Dr. DALY (Pittsburg) said he was quite convinced that very frequently there was dead or diseased bone underlying the seat of origin of nasal polypi, especially if they had existed for some years. The sensation imparted to the probe was quite different from that of healthy bone. He then directed the attention of the members to the great resemblance between temporary œdema with hyperplasia, as in acute catarrh, and the mucous polypi at present under discussion, and expressed his adhesion to the view that polypi arose from chronic inflammatory states. He had never seen antral disease as a precursor of polypi, but he had in several instances seen them produced by malignant neoplasms of the antrum.

Dr. JOHN NOLAN MACKENZIE (Baltimore, U.S.A.) argued in favour of the inflammatory origin of nasal polypi, not only because of its great probability, but also on account of its numerous familiar examples throughout the body. Rarefactive osteitis and caries might, and did, exist in certain cases, but that did not prove Woakes to be correct when he said "necrosis."

Mr. R. LAKE in his own researches had never found polypi &c. save œdematous hypertrophies of the mucous

membrane. He thoroughly disagreed with Dr. Hill's view of the similarity of the aural and nasal polypi. The former started as granulation tissue, developing into soft, then hard fibrous tissue, and later degenerating into myxomata, an entirely different life history to the latter.

Dr. NEWMAN (Glasgow) referred to the chemistry of the growths. It was not a mucoid infiltration, but merely œdema, water salts, and serum albumen. He also urged the importance of œdema in the production of the growths.

Dr. WATSON WILLIAMS drew attention to the very great rarity of myxomata in the nose; so rare was the condition that it might be excluded from the present discussion. He alluded to the work of Zuckerkandl, who had found in some the periosteum inflamed and in others new bone formation beneath the origin of polypi; he had himself observed the same sort of thing with much new bone formation. He was inclined to look on Hoffmann as affording useful help by his vascular theory.

Dr. DE ROALDES (New Orleans) also spoke, showing the almost universal absence of polypi in the negro to be due to his roomy nose.

Dr. GAYE, Dr. LUC, and Dr. MCBRIDE replied.

The Representation of Abduction of the Vocal Cords in the Cerebral Cortex.

Dr. J. S. RISIEN RUSSELL read a paper upon this subject. He reviewed briefly the valuable scientific work done by Semon and Horsley, who had discovered many points of great value, but who had been unable to find the cortical abductor centres in dogs and monkeys, though they had done so in cats. But they had demonstrated the existence of a focus in the internal capsule, the most natural deduction from which was that there did exist a connexion between this and certain areas in the grey matter which would cause abduction when stimulated. The predominant energy of the adductors was nullified by the following means. The adductor fibres were divided from the abductor fibres in the recurrent laryngeal nerve and the former divided. A stimulus applied now to a point in front of Krause's adductor centre caused abduction of the cords, whilst stimulation of Krause's centre on the side with the intact nerve resulted in adduction of that cord. In some dogs it was even possible to obtain the movement of abduction without this nerve division, and then the centre was found to be in the anterior composite gyrus below the adductor centre, only separated from the other by the supra-orbital sulcus. The focus in the cat corresponds with the first one discovered in the dog, but there the cat differs from the dog—cats always react. Two other centres were alluded to, that of Semon and Horsley in the cat, to which Dr. Risien Russell supplied an analogue in the dog, and one in the anterior composite sulcus, stimulation of which arrested the vocal cords in adduction.

The PRESIDENT congratulated Dr. Risien Russell on his paper, saying that he had succeeded in doing what he (the President) and Professor Horsley had failed to prove, and he should like to hear what Dr. Risien Russell's opinion was as to the unilaterality of the cortex regarding laryngeal movements.

Dr. BRYSON DELAVAN and Dr. WATSON WILLIAMS took part in the discussion, each quoting a case bearing on the points raised.

Dr. RISIEN RUSSELL replied that he had found no unilaterality in the cortical centres for the larynx.

The Vibration of the Vocal Cords.

Dr. A. HODGKINSON read a paper with the above title, in which he described a very ingenious method which he had employed for the last five or six years to demonstrate the parts of the cords which vibrated. He had adopted the sand picture plan, but instead of sand used finely powdered indigo to blow upon the cords, and by means of various pitches had been able to produce various pictures which were fairly constant, and which tended to show the cords had a greater amplitude of vibration at the central free edge, and the lower the pitch the longer the vibrating portion.

Dr. ILLINGWORTH read a paper on the Anatomy and Physiology of the Larynx.

THURSDAY, AUG. 1ST.

On the Infectious Nature of Lacunar Tonsillitis.

This subject was introduced by Professor B. FRAENKEL, who gave first a description of the usual course and symptoms of a case of ordinary acute follicular tonsillitis, showing how it simulated an infectious fever by its onset, course, and crisis, and by its splenic enlargement. He recommended excision of hypertrophied tonsils in a state of acute exacerbation; in these the pathological anatomy of the part could be studied, and such patients do not suffer at all more than usual. Microscopic examination of those tonsils showed an increase of emigration of the leucocytes from the follicles; these passed into the lacunæ. He referred to the occurrence of tonsillitis after intra-nasal operations, and he had found the same micro-organisms in both this and the usual form of tonsillitis. Micro-organisms are found even in the substance of the follicles. He had observed undoubted cases of transmission of the disease from one patient to another, and a chill—so frequent a cause—serves only to open the door, as it were, to these microbes.

Dr. MACINTYRE (Glasgow) referred to the confusion which existed from a bacteriological point of view in the classification of tonsillitis. He then considered critically the micro-organisms found in the tonsil before, during, and subsequently to an attack of tonsillar inflammation, referring incidentally to the non-pathogenic organisms of the mouth. He next considered the toxic effects of the micro-organisms and related cases much resembling typhoid fever in which the Peyer's patches became involved, one case ending fatally, and he referred to other lesions such as synovitis.

Dr. SEMON referred to the great importance of the subject.

Mr. LENNOX BROWNE said that the galvano-cautery when used in the nose was more frequently followed by tonsillitis than other intra-nasal operations; this was because the nose ceased to act as a filter. He considered rheumatism when associated with tonsillitis to be a case of auto-infection. He had found various organisms in this disease, but no specific one. Sanitation, or rather want of it, had much to answer for.

Dr. MORITZ SCHMIDT considered careful antisepsis of the nasal cavities and plugging with antiseptic gauze diminished the risk of traumatic lacunar tonsillitis supervening.

Dr. ST. CLAIR THOMSON said he considered traumatic lacunar tonsillitis to be due to plugging of the nose by the swollen mucosa.

Dr. GLEITSMANN had feared to excise tonsils which were inflamed, dreading the large open wound in the state of the surrounding parts. He used trichloracetic acid after the cautery, and so kept the nostrils patent, but that did not stop the trouble.

Mr. L. LAWRENCE referred to the connexion between tonsillitis and rheumatic fever.

Professor FRAENKEL and Dr. MACINTYRE replied.

The Functions of the Laryngeal Ventricles and Ventricular Bands.

Dr. A. HODGKINSON read an interesting paper on this subject, in which he arrived at the following conclusions—that the dust particles were prevented from acting as mechanical irritants on the cords by the action of mucus and mucus-cells, and that, as by his observations he had concluded that mucus &c. from the larynx passed over its posterior wall, so the seat of election of tuberculous infection was due to this likewise. He also said he had himself seen blood flowing out from the ventricles, and thought that we must not conclude that all coughed-up blood &c. necessarily came from the lung, and that the cords were cleared by deglutition.

Dr. CATHCART and Dr. MORITZ SCHMIDT combated his views, urging the theory of Wylie as the correct one.

Intra-Laryngeal Injections.

Dr. BRONNER (Manchester) read a paper on some Cases of the Larynx and Bronchi treated by Intra-laryngeal Injections, in which he referred to the absorption by the bronchi of various fluids. Menthol solution (5 to 20 per cent.) is useful to allay cough and to deodorise; terebene is very efficient for profuse and offensive sputum—10 to 50 per cent. with menthol solution, or 2 per cent. ol. pimentæ, or 3 per cent. europhen; and soda or iodine in deficient secretion. Cocainisation is to be first done. With a little practice Dr. Bronner says the operator can more or less direct the stream into the bronchus selected. The first case quoted was that of a man who suffered from a tickling in the throat at night which prevented sleep; he was quite cured by this method. The next case was very similar, and was cured. The third

was a case of atrophic laryngitis; this was nearly cured, and the distressing cough is almost gone. Other cases were bronchitis (chronic) and chronic bronchitis and asthma, both practically cured. In a case of laryngeal phthisis the distressing cough was stopped.

FRIDAY, AUG. 2ND.

The Indications for Early Radical Operation in Malignant Disease of the Larynx.

Dr. BRYSON DELAVAN (New York) and Mr. BUTLIN opened this discussion, the former taking up the more conservative position. The PRESIDENT, Dr. SEMON, Dr. J. N. MACKENZIE (Baltimore), Professor MORITZ SCHMIDT (Frankfort-on-Maine), Dr. SCANES SPICER, Dr. R. WOODS (Dublin), Dr. Lawrence, Dr. DUNDAS GRANT, Dr. HODGKINSON, and others took part in the discussion, Dr. DELAVAN and Mr. BUTLIN replying.

Thyrotomy.

Mr. P. DE SANTI read a paper on the Operation of Thyrotomy, with a short account of the cases in which it has been performed at St. Bartholomew's Hospital during the last nine years. Thyrotomy was first performed at St. Bartholomew's Hospital in 1886; since then nine thyrotomies had been performed there for malignant disease and eight thyrotomies for innocent growths and other causes. Mr. Butlin's private cases were nine for malignant disease and two for innocent growths, which altogether make twenty-eight thyrotomies. Mr. de Santi preferred chloroform to ether in this operation on account of the excessive secretion of saliva. He also laid stress upon the sponge round the Hahn's tube being aseptic. He advocated the use of a 5 per cent. solution of cocaine to the larynx after division of the cartilage, to lessen the hæmorrhage and remove reflex excitability. The sponge cannula is to be removed, and the wound dusted with iodoform and covered with gauze; the patient should be kept on his side with the head low in order to facilitate the flowing away of the discharge and lessen the risk of pneumonia. The feeding of the patient during the first two days is chiefly done by nutrient enemata; on the day following the operation the power of swallowing should be tested.

Vocal Defects among School Board Teachers, with special reference to the occurrence of Teachers' Nodes.

Dr. WILLIAM MILLIGAN (Manchester), after enumerating the various catarrhal conditions and their more usual sequelæ, proceeded to node formation. He had seen nodes in girls aged fourteen. He dwelt upon the factors which played an important part in the development of catarrhal and subsequent changes, such as the size of the class, the age of the teacher, want of exercise, and the like.

On Chorditis Tuberosa.

Dr. A. HODGKINSON (Manchester) dwelt upon the pathological anatomy more than the clinical aspect, which was more fully developed by the preceding speaker. The mechanical cause here was the friction of inflamed parts of the cord, which takes place usually at that point; the nodes appear, and the pathological picture was clearly defined.

ERRATUM.—We find that in our report of the discussion upon Chronic Glaucoma we have attributed to Mr. Nettleship, who opened the debate, the remarks made by Mr. Power. Mr. Nettleship, in his introductory words, submitted "that it was undesirable to maintain the distinction between typical chronic glaucoma and atrophy with cupping of the optic disc; that the risks of iridectomy in producing rapid deterioration of vision were less than has been supposed; that retarded progress of the disease is often, and permanent arrest not rarely, secured by iridectomy performed early; that it is often right to operate in the premonitory stage of glaucoma; and that iridectomy is nearly always to be preferred to sclerotomy for chronic glaucoma."

THE MUSEUM.

(*Continued from p. 381.*)

II.—MEDICAL AND SURGICAL APPLIANCES.

SOME of the most important exhibits which may be grouped under this head were arranged in that section of the museum held in certain of the rooms of King's College. Thus the Society of Anæsthetists had an excellent collection of the various appliances employed in connexion with the administration of anæsthetics; and Messrs. Thos. J. Syer and Co. (Wilson-street, E.C.) explained their patent combined consulting-room couch and operating-table, with its improvement for head support and throat examination, while Messrs. Down Bros. (Thomas-street, S.E.) had a space completely equipped as an aseptic operating-theatre, and their aseptic furniture for hospital wards and out-patients' rooms, and a completely fitted aseptic surgeon's consulting- and operating-room, formed an interesting group instructive of the requirements of modern advances. A special feature of the exhibit of Messrs. Allen and Hanburys (Plough-court, Lombard-street, E.C.) was the operating-table, which formed part of the appliances of a well-appointed operating-theatre. It is made entirely of enamelled iron and is provided with a series of pipes for the circulation of hot water, so that the temperature of the patient may be maintained. The surface frame is movable and easily adjusted for the Trendelenburg and other positions. Various patterns of operating-cushions, securing cleanliness in operations, were also shown, as well as several designs of consulting-room couches, while the special aseptic washhand stand for the foot movement only, so that the operator does not touch the tap with his hands, must be numbered amongst the important novelties of this section.

As mentioned elsewhere, Messrs. Allen and Hanburys had a most imposing array of surgical instruments in the examination-hall—far too numerous to be even alluded to. We must be satisfied, therefore, with referring to some of them, which, regarded as "up-to-date" appliances, may be taken as examples of the rest. Several advantages, for instance, are claimed for a new rectal speculum, designed by Mr. E. C. Ryall, and a new midwifery forceps with detachable aluminium handles presents some obvious improvements, since it is aseptic and easily sterilised, and the light handles are easily detached by means of a spring catch. Then should be included the Murdoch-Cameron midwifery forceps, adapted for use in cases of marked contraction of the pelvis, even to as much as three inches; a modification of Dr. Champetier de Ribes' bag for induction of premature labour, obviating increased tension in the uterus and the danger of displacing the child's head; Mr. J. S. Ellis's modification of Sir Spencer Wells' and Mr. Lawson Tait's clamp for the compression of uterine fibroids; improved aseptic midwifery bags with movable linings; Mr. Ryall's double probes for fistula; the now well-known anastomosis buttons (Murphy); the Allenburys' chrismaline atomiser and powder insufflator; and, lastly, the hypodermic syringes with platino-iridium needles for the administration of antitoxic serum, which this firm supply direct from the British Institute of Preventive Medicine.

It is hardly necessary to state that the exhibit of Messrs. Arnold and Son (West Smithfield) consisted of all sorts of improvements, comprising hypodermic syringes, hæmorrhoidal clamps, vaginal douches, exploring and drainage tubes, catheters, aseptic instruments and case, urethral knife, uterine stem, binaural stethoscope, ice caps (for ophthalmic application), complete midwifery sets, amputation cases, and so on—all constructed in accordance with the suggestions of medical men. On account of their importance and interest doubtless no less than four entire pages of the catalogue were devoted to the list of appliances of Messrs. Down Bros. (Thomas-street, S.E.). Among their comparatively recent specialities should be mentioned Dr. Herschell's improved binaural stethoscope, provided with a lever by means of which the joint may be clamped and fixed at any point, thus obviating the use of a spring, which may press too severely or be too slack; a chest-piece, with finger-rest (suggested by Mr. G. A. Skinner), which is a useful and convenient adjunct to the binaural stethoscope; a new midwifery bag; and the anastomosis buttons of Dr. Murphy for lateral and end-to-end approximation.

Amongst the interesting appliances of Messrs. Burroughs, Wellcome, and Co. (Snow Hill-buildings, E.C.) their "insufflator" should be specially noticed. It is a very satisfactory instrument for the application of dry powders by insufflation to the nasal and oral mucous surfaces, sores, abscesses, and so on, and can be directed and worked with one hand. It is also provided with interchangeable powder cylinders, and may have attached to it a tongue depressor, a branched delivery tube, or a vaginal tube for special purposes. The

hypodermic and ophthalmic pocket cases of this firm, as also the patent aluminium syringe, are now so well known, and present advantages which are so manifest, as hardly to need mention. Every possible requisite employed in the treatment of disease by electricity was to be found in the striking exhibit of Mr. K. Schall (Wigmore-street) where, towering above the other appliances, was a large Wimshurst machine, which by the crack of its lightning-like sparks served as a powerful attraction in this section of the museum. There were batteries for faradaisation with acid and dry cells, batteries for galvanisation and electrolysis (continuous current), galvanometers, rheostats, electrodes, and batteries and instruments for galvano-cautery, for surgical lamps, for laryngoscopic, ophthalmoscopic, and other obvious exploratory purposes, &c. The "antrophors," exhibited by Messrs Thos. Christy and Co. (Lime-street, City, E.C.), for the treatment of urethral and prostatic diseases, consist of flexible spiral springs coated with an insoluble rubber covering to guard against irritation and to prevent decomposition of the medicament by the action of the metal spring. The soluble medicated mass covers the first insoluble coating and when inserted into the urethra gradually melts and is absorbed by the mucous membrane. Messrs. G. and G. Stern (Gray's-inn-road, W.C.) showed a novelty in the shape of breast protectors, which they call the "Neena breast shields." They are made of a light, firm, material, and afford an easy and comfortable support for the breast in health or disease. An important provision in these is also a series of small perforations by which ventilation is secured, while the material admits of cleansing, which with care need not affect the shape. Prominent amongst the surgical appliances, including antiseptic dressings, artificial limbs, aseptic instruments, and so on, of Messrs. Ferris and Co. (Bristol) was their "ever ready" caddy—a modern *sine quâ non* of the general practitioner—which is a neat and tidy storehouse for the textile materials, plasters, dressings, &c., used in surgical work. Mr. J. H. Montague (New Bond-street, W.), besides exhibiting many new and important surgical instruments and appliances, including Eric France's phimosis scissors, also showed some latest developments connected with electro-therapy. Ophthalmic instruments were well represented in the exhibit of Messrs. Curry and Paxton (Great Portland-street), who showed ophthalmoscopes, perimeters, optometers, trial glasses, glasses for astigmatism, &c., and various opto-electric appliances. Messrs. J. Hewlett and Son (Charlotte-street, E.C.), amongst their exhibits, submitted to inspection a bone forceps with serrated edge and closing screw for dividing metacarpals, phalanges, &c., made at the suggestion of Dr. T. H. Morton of Sheffield.

Antiseptic dressings, prepared according to the formulæ of Sir Joseph Lister, and including gauzes (carbolic, double cyanide, &c.), lints, wools, tows, ligatures, and sutures, formed the feature of the preparations of Messrs. Macfarlan and Co. (Moor-street, E.C.), although a specially purified chloroform for anæsthetic purposes, costing, it is stated, about half the price of chloroform made from rectified spirit, should also be mentioned. Similar preparations were shown by Messrs. Robinson and Son (Fann-street, Aldersgate-street, E.C.), whose speciality is absorbent cotton-wool placed between absorbent gauze (well known as Gamgee tissue)—the *ne plus ultra* dressing for wounds &c. The "Domen" belts, corsets, bandages, &c. of the Domen Belts Co. (Moor-lane, E.C.) are sufficiently well known to the profession on account of the excellence of their design to need no more than passing allusion. A glance at the excellent assortment of surgical instruments ingeniously fashioned to every conceivable requirement of modern surgery sufficed to confirm the reputation for finish and superior workmanship which Messrs. John Weiss and Son's (Oxford-street, W.) goods have justly earned. In regard to tape plasters, Messrs. Leslie and Co. (Walbrook, E.C.) have lately made an important addition to their list in the form of a rubber adhesive strapping which presents many advantages. The well-known excellence of this firm's other dressings is evidently maintained.

The list of the Medical Supply Association (High Holborn, W.C.) included a good assortment of various appliances—as, for example, a combined reading, eye, and throat lamp, improvements in cautery burners, nasal, ear, and eye instruments, &c., while, close by, Messrs. Fassett and Johnson (Snow-hill, E.C.) exhibited their absorbent cottons, lints, gauze, antiseptic dressings, medicated dressings, &c., all of which are well known for their standard uniform and reliable character. The ingenious air-tight aseptic container for medicated bandages is an important introduction of this firm. It consists of wood fibre package incorporated with an antiseptic and coated within with antiseptic lacquer. The joints overlap and are made not only doubly secure by an overlapping label but also air-tight by the entire surface being lacquered. It is compact, durable, and trustworthy. Lastly, the exhibit of Messrs. W. Bartleet and Sons (Gresham-street, E.C.) was chiefly set apart for "surgical needles" of every description.

III.—Special Foods and Food Adjuncts.

As will be seen, this Section comprised a really valuable collection of foods and food aids, not a single exhibit being submitted for inspection which had not in our judgment a distinct claim upon the attention of the practitioner. Let us take, for example, the sterilised preparations of milk of the Aylesbury Dairy Co. (St. Petersburg-place, W.), who now supply sterilised milk in vacuum stoppered bottles, and also humanised milk, the composition and character of which we have already favourably reported upon. This exhibit also included a laboratory, fully equipped with appliances for the examination and analysis of milk, the demonstration of which by the company's chemists was watched with great interest. "Koumiss" and Mueller's sterilised food for infants and invalids were also amongst the excellent products shown by this company. Again, Messrs. Armour (Tooley-street, S.E.) had a well-arranged list of their well-known laboratory products on view, including their standard and reliable preparations of pepsin (powder, granular, scale, and soluble powder), glycerole pepsin, pancreatic powder, and desiccated ox-gall, while as examples of powerful nutrients should be mentioned the palatable wine of beef peptone (1 oz. representing 1 oz. of prime beef), beef peptone paste and powder, concentrated extract of beef, and the not inaptly named preparation "vigoral," containing beef fibre. A satisfactory feature of these preparations is their fresh and meaty flavour.

Messrs. Allen and Hanburys showed their malted infant's food—first food for infants and mother's milk food—in the form of powder, sterilised, and of a composition exactly in accordance with physiological requirements, as we have elsewhere shown. Their well-known malt extract preparations were, it is needless to add, also on view. A great variety of foods eminently adapted for use in diabetes and obesity were submitted for inspection and taste by Messrs Callard (Regent-street, W.). These included a "Parmesan and celery cheese straw," an after-dinner biscuit of really tempting flavour; sponge and almond cakes, affording an agreeable change from the usual dry foods; walnut, hazel-nut, and pine-nut biscuits, belonging to a new series of afternoon tea biscuits; aleuronat (vegetable albumin) biscuits, in imitation of oatmeal biscuits and quite free from starch and sugar; almond meal biscuits, a plain, palatable form of every-day food; and the "Callista" biscuit, recently reported by us as of unquestionable nourishing value, despite the absence of starch, sugar, and butter. This admirable list may be concluded with the mention of the excellent ivory jelly made by this firm, which is so prepared that the phosphates are secured in a perfectly soluble form; it is, therefore, justly urged as valuable for bone-building and for children teething or with rickets. Messrs. Stern (Gray's-inn-road) have recently brought out a nourishing food under the name of "Narissa." Judging from its analysis, it is correctly described as a complete food, containing a high proportion of albumin and phosphates, a suitable amount of fat, and a minimum of starch. In practical use it is spoken of highly. Messrs. Nestlé's (Cannon-street, E.C.) concentrated milk may be confidently used for all the purposes of fresh milk, since it is sterile and contains all the fatty principles of the original milk intact.

The superiority and purity of the digestive ferments prepared by Messrs. Fairchild, Bros., and Foster (New York; London agents, Burroughs, Wellcome, and Co., Snow-hill Buildings) are well known. They have recently introduced some excellent dietetic aids called, respectively, "panopepton" (a palatable bread and beef peptone, containing the edible substance of prime lean beef and best wheat flour, thoroughly cooked, digested, sterilised, and concentrated *in vacuo*); "peptogenic powder" (for peptonising milk and preparing "humanised milk"); and pepsencia (an active digestive essence obtained by direct

extraction from the fresh calf rennet). Experiments demonstrating the value of these preparations afforded an interesting feature of this exhibit. Under the curious title "Food Specialists and Medical Comfort Contractors" the Bovril Company (Farringdon-street, E.C.) exhibited their well-known preparations, the original product "Bovril" being now widely esteemed as a cheap, yet pleasant, and undoubtedly comforting and nourishing beverage containing the meat fibre as well as the extractives. Self-digesting "whole meal food" and "best food for infants" are titles which have long been associated with two well-known preparations of Messrs. Savory and Moore (New Bond-street, W.), besides which should be mentioned, although they are equally well known, the peptonised preparations of this firm, which are valuable alike in health and disease.

An interesting dietetic preparation is the Cerebos nutritive table salt of the Cerebos Salt Company (Upper Thames-street, E.C.), which contains, it is said, mixed phosphates in the natural proportions of wheaten bran, and even a minute proportion of calcium fluoride, a normal constituent of the enamel of the teeth. It is a clean white salt, and is considered to be of service in aiding the formation of the bones and teeth. Amongst foods well adapted for infant feeding is Horlich's malted milk, the constituents of which have been carefully modified by the action of diastase to suit the needs of infants and invalids. Its analysis presents the composition of a complete food, rich alike in albuminous and mineral substances, while milk sugar with dextrine are the only carbohydrates present. It is a distinct advantage that this preparation requires no cooking, but is simply to be dissolved in warm water, the resulting fluid closely resembling milk in appearance. Specimens were exhibited by the London agents of 39, Snow-hill, E.C. It is impossible in the space at our disposal to exhaust the list of Messrs. Brand's (Mayfair, W.) specialities for invalids, including their well-known meat essences, but we may mention the albuminous essence of beef, consisting of the juice of the finest beef and containing a portion of the albuminous, fatty, and—important to add—fibrous elements. Brand's meat-juice we have already dealt with at length in a critical and, we may add, satisfactory report emanating from our laboratory.

Similarly we have pointed out the high food value by analysis of Mosquera beef jelly and beef meal, which were amongst the food products shown by Messrs. Parke, Davis, and Co. (North Audley-street, W.)

Amongst the many excellent food preparations placed now at the disposal of medical men must be reckoned the liquid beef peptonoids of Messrs. Carnrick and Co. (Hart-street, Bloomsbury, W.C.), with or without coca; cod-liver oil milk; and a milk-wheat food (soluble food). Each and all are of a remarkably high standard of nutrient value. A satisfactory product, as we have on a previous occasion shown, is the Viking brand of unsweetened condensed milk (Norwegian Milk Condensing Co., Philpot-lane, E.C.). It contains no added sugar, no objectionable preservatives, and a proper proportion of fat, while its flavour is good. The essences, jellies, and meat juices of the Viking Food and Essence Co. (King's-road, St. Pancras) formed an attractive exhibit amongst food specialities and delicacies for invalids, a feature of these preparations being their delicate and pleasant meaty flavour. The merits of the Liquor Carnis Co's. (Farringdon-street, E.C.) preparations have been already emphasised by our own laboratory results as evidenced in their powerful meat juice and in marrol, malto-carnis, and virol. Virol-sans-Sucre—like the last, a preparation of red and yellow bone-marrow, rich in hæmoglobin and organic compounds, but free from starch and sugar—is a comparatively recent and important addition to this list of highly nourishing foods, which, further, are in the highest degree palatable. The name of Van Abbot (Duke-street Mansions, Grosvenor-square) is well known in association with diabetic foods, of which an excellent collection was shown, providing the diabetic not only with food which he may eat, but which is also of an agreeable kind. Bran biscuits for constipation, hypophosphite of lime biscuits for delicate children, and obesity biscuits manufactured by the same firm are entitled to an equal meed of praise. As an illustration of the recent advances made in the preparation of condensed milk we may take the specimens shown by the Anglo-Swiss Condensed Milk Company (Mark-lane, E.C.) comprising "ideal milk," not sweetened, but preserved by sterilisation and enriched with 20 per cent. pure cream; ordinary condensed milk containing the cream of the original milk; and, finally, a very palatable preparation of condensed milk with cocoa. Lastly, the preparations and compounds (cod-liver oil, for example) of active malt essences were well represented in the exhibits of Messrs. Allen and Hanburys, Messrs. Burroughs, Wellcome, and Co., the Maltine Co. (Hart-street, Bloomsbury), the Standard Malt Extract Co. (Billiter-street, E.C.), who also exhibited a liquid extract, and the Malto-peptone Co. (Leadenhall-street), who prepare also active malt jellies, with and without cod-liver oil, the obvious advantages of which were only recently pointed out in our Analytical Records (*vide* THE LANCET, April 27th, 1895).

(To be continued.)

THE MUSEUM OF MEDICAL ANTIQUITIES.

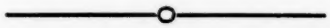
THE interesting collection of votive offerings of ancient Italy and surgical instruments brought together by Dr. Luigi Sambon, and exhibited by Messrs. Oppenheimer, Son, and Co., Limited, in the Victoria Rooms of the Savoy Hotel, attracted considerable attention. Certainly the collection was a remarkable one, and Dr. Sambon, who has been commissioned by the Government of Italy to prepare a work on the history of medicine for the next International Medical Congress, deserves great praise for his assiduity in bringing together a series of antiquities that throw considerable light on the history of the healing art. The exhibition may be divided into two parts, one a collection of "donaria" or votive offerings for cures performed or desired, and the other a collection of surgical instruments taken from the ruins of Pompeii and Herculaneum. Some sixteenth and seventeenth century instruments were also shown, and their

rude construction when compared with some of the more ancient was not a little surprising. The donaria consisted of terra-cotta models of almost all parts of the body and tablets showing full-sized figures both individually and in groups. One fine specimen represented a mineral spring, on one side of which stands Hercules (usually associated with hot springs) with both his hands over the region of the bladder, indicating that the water is good for the kidneys &c. The tablet above, of which Dr. Sambon has kindly supplied us with a photograph, is a good type of some of the best of these donaria. It is a votive offering for disease

found at the Temple of Maternity, Capua, and is intended to show hypertrophied breasts and abdominal tumour, or perhaps pregnancy.

Some of the smaller offerings were made of bronze, some of silver, and in rare cases of gold. These were nailed to the walls of the temples and shrines. One series of donaria connected with lactation came principally from the Temple of Maternity at Capua and the Minerva Medica in Rome.

The collection of ancient surgical instruments was very interesting. The Roman instruments are remarkable for their simplicity and beauty. In a few cases they are coated with silver, and have on them the names of the medical men to whom they belonged. They are entirely of metal and much better than those used 800 or 900 years ago. The blades of the scalpels and lancets were of iron with handles of bronze, but in most of the instruments the blades have rusted away. Those found in the bed of the Tiber, however, are still intact. The instruments are in great variety and are most ingenious in construction. As they are made of metal, it is easily conceivable how liable they were to slip in the hands of the surgeon, especially when covered with blood, and the device adopted to prevent this (where the instrument lent itself to it) was as ingenious as it was simple. A glance at the accompanying diagram will explain this better than a verbal description. The centre of the instrument was moulded into the form of a ring, and a slight pressure of the index or other finger made the grip quite firm.



Although perhaps remotely connected with the majority of the exhibits, three safety pins and a metal cup-shaped vessel perforated with a number of holes, and containing a cast very much like the half of a lemon, forcibly reminded visitors that "there is no new thing under the sun."

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the First Examinations of the Board in the subjects indicated under the Four Years Regulations:—

Part I.—Chemistry, including Chemical Physics:—

Bell, Victor Samuel Alexander, University of Cambridge and St. Bartholomew's Hospital.
Bennett, Percy Moore Septimus, Middlesex Hospital.
Bulteel, Christopher Herbert Dimond, King's College, London.
Butler, Thomas Langton, St. Mary's Hospital.
Dean, Edmund Clapperton, University College, London.
Hort, Frederick Aylmer, Middlesex Hospital.
King, Thomas Arthur, University of Cambridge and St. Thomas's Hospital.
Lewis, Lewis Evan, University College, Cardiff.
Nicholls, Ernest Albert, London Hospital.
Nicholls, William, St. Bartholomew's Hospital.
Scott, Charles Augustus, Charing-cross Hospital.
Thomas, Elijah Richard Lockwood, London Hospital.
Williams, William Wheldon, University College, London.

Part II.—Materia Medica:—

Andrew, Alfred John, St. Bartholomew's Hospital.
Bennetts, Archibald James, St. Mary's Hospital.
Brundrett, Gilbert Thomas, Owens College, Manchester.
Collingwood, Percy Hilderbrand, St. Thomas's Hospital.
Davies, William John Edwin, St. Thomas's Hospital.
Dean, Edmund Clapperton, University College, London.
Dring, Henry George Carpenter, St. Bartholomew's Hospital.
Du Heaume, Ernest Philippe, St. Bartholomew's Hospital.
Ellis, Richard Thomas, Yorkshire College, Leeds.
Gayner, John Stansfield, St. Bartholomew's Hospital.
Good, Hardman Allgood, King's College Hospital.
Grüber, Parkinson Osborne, St. Bartholomew's Hospital.
Hatfield, John Rayner, Yorkshire College, Leeds.
Hay, William Leslie, King's College, London.
Hayes, Arthur John, Middlesex Hospital.
Holman, Thomas Edward, Guy's Hospital.
Howells, John, London Hospital.
Iliffe, Caris William, Owens College, Manchester.
Jones, Alfred, London Hospital.
King, Neville Pearce, Charing-cross Hospital.
Knowlton, Alexander John, Middlesex Hospital.
Langworthy, Edward Southwood, St. George's Hospital.
Leary, George Edward, Mason College, Birmingham.
Longhurst, Ernest Thomas, St. Mary's Hospital.
Maskew, Charles Henry, Mason College, Birmingham.
Mitchell, William Grant, Guy's Hospital.
Nicholls, William, St. Bartholomew's Hospital.
Nimmo, Frank Hutton, St. Bartholomew's Hospital.
Pomeroy, Edward Hugh, Guy's Hospital.
Porteous, Herbert Llewellyn, Middlesex Hospital.
Pugh, Charles Grant, Middlesex Hospital.
Quirke, Edwin Alphonsus, Mason College, Birmingham.
Ransford, Sydenham Least Gifford, St. Mary's Hospital.
Rouillard, Jean Antoine Abel, St. Thomas's Hospital.
Scott, Charles Augustus, Charing-cross Hospital.
Smith, Arthur Lionel Hall, University College, London.
Square, Arthur Powell, Middlesex Hospital.
Stratton, Percy Haughton, Mason College, Birmingham.
Thornton, George Lestock, St. George's Hospital.
White, Alfred Skeate, Ledwich School, Dublin.
Wood, Jacob Medley, Middlesex Hospital.
Woodstock, Charles Percy, Anderson's College, Glasgow.
Woollcombe, Alfred, St. Bartholomew's Hospital.

Part III.—Elementary Anatomy and Elementary Physiology:—

Brundrett, Gilbert Thomas, Owens College, Manchester.
Bulteel, Christopher Herbert Dimond, King's College, London.
Dean, Edmund Clapperton, University College, London.
Dowling, Stanislaus Marcus, Catholic University of Ireland, Dublin.
Evans, John, St. George's Hospital.
Hawkins, Arthur, University of Cambridge and St. Bartholomew's Hospital.
Hey, Samuel, University of Cambridge and St. Bartholomew's Hospital.
King, Thomas Arthur, University of Cambridge and St. Thomas's Hospital.
Marsden, Walter, Yorkshire College, Leeds.
Mayor, Hamlet Horace, Owens College, Manchester.
Mort, James Henry, University of Cambridge.
Nicholson, Guy Berners, University of Cambridge.
Sanders, Charles Henry, St. George's Hospital.
Simpson, Fred Algernon, University of Cambridge and St. Mary's Hospital.
Walker, Georges Charles, University College, Liverpool.

Elementary Physiology only:—

McCarthy, Tom, Queen's College, Cork.

THE ASSOCIATION OF BRITISH POSTAL MEDICAL OFFICERS.—The annual general meeting and conference of this association were held on July 31st in the Hôtel Métropole, London, Dr. John Watson, the Vice-President, occupying the chair in the unavoidable absence of the President, Mr. Frank Iliffe. There was a large attendance of members. The secretarial report exhibited a persistent and encouraging increase in the membership, and in the subsequent discussion the opinion was expressed by those present that it should be clearly intimated to those who are still non-members that admission into the association in the near future would be attended by considerable difficulty. Several important matters were brought under discussion, but the reading of a paper by Dr. Giddings on the subject of How much should Postal Medical Officers be influenced by Heredity in examining Candidates for the Postal Service was postponed on account of the numerous engagements connected with the meeting of the British Medical Association. The following executive was elected for the ensuing year:—President: Mr. Matthew C. Halton, J.P., M.R.C.S., Ex-Mayor of Barnsley. Vice-Presidents: Mr. Frank Iliffe, M.R.C.S., Derby; and Mr. John Watson, M.D., Manchester. Honorary Secretary in Scotland: Mr. W. Dougan, M.D., Glasgow. Honorary Secretary in Ireland: Mr. H. Fitz-Gibbon, M.D., Dublin. Honorary General Secretary and Treasurer: Mr. R. Ritchie Giddings, M.B., Nottingham. Executive Committee: Mr. Edwin L. Adeney, J.P., M.D., Tunbridge Wells; Mr. J. Walton Browne, M.D., Belfast; Mr. Matthew Coates, M.D., London; Mr. W. Hugh Hughes, J.P., M.R.C.S., Ashton-under-Lyne; Mr. W. Husband, M.R.C.S., Manchester; Mr. Bertram Thornton, J.P., M.R.C.S., Margate; and Mr. S. Walker, M.R.C.S., Middlesbrough. Auditors: Mr. W. Dougan, M.D., Glasgow, and Mr. T. West Symes, M.D., Halifax. In the evening the annual banquet took place in the Whitehall Rooms and was a very great success, Mr. Frank Iliffe, the President, being in the chair.

SUPERANNUATION ALLOWANCE.—Mr. Edward Marshall, M.R.C.S., late medical officer of the Mitcham Schools, Surrey, has been granted a superannuation allowance of £66 13*s.* 4*d.* per annum.

LITERARY INTELLIGENCE.—Messrs. Chapman and Hall have been constituted sole agents in this country, the Continent, and the Colonies for the sale of the important scientific and technological publications of Messrs. Wiley and Sons of New York.

BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION, 1895–96.—The following is the list of office-bearers elected on July 25th, 1895:—President: Mr. Geo. Stoker (London). Vice-Presidents: Dr. Ed. Law, Dr. Middlemass Hunt (Liverpool), and Dr. Wm. Milligan (Manchester). Council: Metropolitan—Dr. W. McNeil Whistler (*ex-officio*), Dr. Dundas Grant, Mr. Mayo Collier, Mr. Wyatt Wingrave, and Mr. G. C. Wilkin; Extra-Metropolitan—Dr. J. M. E. Scatliff (Brighton) and Mr. John Bark (Liverpool). Hon. Sec.: Dr. Pegler.

PRESENTATION.—Dr. A. S. Merrick, resident medical superintendent of the Belfast District Lunatic Asylum, was the recipient, on the 7th inst., of an address and a silver salver, as mementoes of his long period of service in the institution. The Rev. N. E. Smith, by request, made the presentation. He said that he had known Dr. Merrick for twenty years. No one had been more successful in the management of such an important institution. The presentation was not one on leave-taking or of departure. They trusted Dr. Merrick would long remain with them, that while as years went on the ties that now bound them together would become more closely knit.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The New Parliament.

THE new Parliament met for the first time on Monday, Aug. 12th, when there was a good attendance both of Lords and Commons. The latter elected Mr. Gully again as their Speaker, and next day Her Majesty the Queen signified approval of the election. Two days being occupied with the swearing-in of members, the Queen's Speech was not read until Thursday, Aug. 15th.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ADAMS, J. D., M.D. St. And., M.R.C.S., has been appointed Medical Officer of Health to the Long Ashton Rural District Council.

BAILEY, THOS. R., M.D., C.M. Edin., has been appointed Medical Officer of Health to the Bilston District Council.

BARCROFT, A. E. I., L.K.Q.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Myddle and Baschurch Sanitary District of the Ellesmere Union.

BEATTIE, R., M.D., M.Ch. Irel., M.R.C.S., has been appointed Medical Officer of Health for the Toothill Upper Urban Sanitary District, vice Brown, resigned.

BIGGAM, JOHN, M.D., C.M. Edin., has been appointed Medical Officer of Health to the Sedgeley District Council.

BOND, N. T., M.B., C.M. Edin., has been appointed Medical Officer for the No. 4 Sanitary District of the Liskeard Union.

BOND, W. A., M.D., B.C., D.P.H. Camb., M.R.C.P. Lond., has been appointed Medical Officer of Health for the Holborn District Board.

BREDIN, J. N., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Polton Sanitary District of the Biggleswade Union.

BROWN, WILLIAM, M.D., C.M. Glasg., has been appointed Medical Officer of Health for the Stapleton District Council.

BYASS, E. S., M.B., C.M., L.R.C.S. Edin., has been appointed Medical Officer for the Slangham Sanitary District of the Cuckfield Union.

CAREY, WM., L.R.C.S., L.M. Irel., has been appointed Medical Officer for the Workhouse and the Holbrook Sanitary District of the Sawford Union.

COATES, RICHARD, L.R.C.P., M.R.C.S., has been appointed Resident Medical Officer to the Newport and Monmouthire Infirmary, vice S. H. Lee, resigned.

CROUCH, C. P., M.B. Lond., F.R.C.S., has been appointed Honorary Medical Officer to the Weston-super-Mare Hospital, vice Alford, deceased.

FOSTER, WM., M.B., D.P.H. Camb., M.R.C.S., has been appointed Medical Officer of Health to the Shipley District Council.

GARSTANG, T. W. H., M.R.C.S., has been appointed Medical Officer of Health to the Knutsford Urban District Council.

GILPIN, R. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health to the Petworth Rural District Council.

GREGOR, A., M.B., C.M. Aberd., has been appointed Medical Officer for the Sutton-on-Trent Sanitary District of the Southwell Union.

HARAN, J. A., M.B., B.Ch. Dub., has been appointed Resident Medical Officer for Barrington's Hospital, Limerick, vice Mulcahy.

HASWELL, J. F., M.B., C.M. Edin., M.R.C.S., has been appointed Medical Officer of Heath to the Penrith Rural District Council.

HIND, ALBERT, L.R.C.S., L.M. Edin., has been appointed Medical Officer of Health to the Southampton Town Council.

JOHNSON, F., L.R.C.P. Irel., M.R.C.S., has been appointed Medical Officer for Hedgerley by the Eton Rural District Council.

JOHNSTONE, J. L., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Upholland Sanitary District of the Wigan Union.

JONES, H. T., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health to the Pembroke Rural District Council.

JONES, R. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Grangetown Sanitary District of the Cardiff Union.

MORISON, JOHN, M.D. Edin., M.R.C.S., D.P.H. Camb., has been re-appointed Medical Officer of Health and Public Analyst for St. Albans City.

NEWTON, R. F., L.R.C.P. Lond., M.R.C.S., has been appointed Medica Officer for the No. 2 Balcombe Sanitary District of the Cuckfield Union.

PARSONS, G. G., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fourth Sanitary District of the Westbury and Whorwelsdown Union.

PURDY, Jas. R., M.B., M.S. Aberd., has been appointed Medical Officer of Health to the Hull County Council.

ROYDS, W. A. S., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the St. Mary Bowine Sanitary District of the Whitchurch (Hants) Union.

SANDFORD, F. J., M.D. St. And., M.R.C.S., has been appointed Medical Officer of Health for the Drayton and Titterby Rural Sanitary Districts.

SANDFORD, G. CALROW, M.B., has been appointed Resident Obstetric Surgeon to the Dispensary, York.

SENIOR, ARTHUR, M.B., B.S. Camb., has been appointed Medical Officer of Health to the Kingston and the Dittons Urban District Council.

STUBB, E. C., F.R.C.S., has been appointed Assistant in the Throat Department of St. Thomas's Hospital.

THOMPSON, W. H., M.D. Durh., L.R.C.P., L.M., L.R.C.S. Edin., has been appointed Medical Officer of Health to the Quarry Bank Urban District Council.

TURNER, J. A., M.B., C.M. Edin., D.P.H. Camb., has been reappointed Medical Officer of Health for Lutterworth.

WEEKS, C. F., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Pinchbeck Sanitary District of the Spalding Union.

WHITTINGTON, S.P., L.R.C.P., L.M., L.R.C.S. Edin., has been appointed Medical Officer of Health to the Neath Rural District Council.

WYCHE, E. M., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer to the Infirmary of the City of London, Bow-road, E

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

CITY ASYLUM, Birmingham.—Clinical Assistant. Board and lodging provided.

CONVALESCENT FEVER HOSPITAL, Gore Farm, Darenth, Kent.—Dispenser. Salary, £5 a month, with board, lodging, and washing. Applications to the Medical Superintendent at the hospital.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer, for one year. Salary £80 per annum, with board and lodging.

GENERAL HOSPITAL, Nottingham.—House Physician, for two years. Salary £100, rising £10 a year to £120. Also Assistant House Surgeon, for six months. Board, lodging, and washing in the hospital provided.

GLAMORGAN COUNTY ASYLUM, near Brigend.—Junior Assistant Medical Officer. Salary £130, rising £10 a year to £150, if approved, with with board (no beer or wine), lodging, and washing.

MIDHURST UNION, Sussex.—Medical Officer for the Union Workhouse, situate at Easebourne, near Midhurst. Salary £30 per annum, with extra fees for midwifery cases. Applications to the Clerk, Midhurst

NORFOLK AND NORWICH HOSPITAL.—Assistant to House Surgeon, for six months. Board, lodging, and washing provided.

ROYAL SOUTHERN HOSPITAL, Liverpool.—Third House Surgeon. Salary £55 per annum, with board, lodging, and laundry.

STAFFORDSHIRE GENERAL INFIRMARY.—Assistant House Surgeon. Salary £30 per annum, with board, lodging, washing, &c.

THE COUNCIL FOR THE BOSTON RURAL DISTRICT.—Medical Officer of Health for the District, for five years. Salary £110 inclusive. Applications to the Clerk of the Council, 10, New-street, Boston.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £100 per annum, rising £10 a year up to £150, with board, &c.

Births, Marriages, and Deaths.

BIRTHS.

AITKEN.—At Craigard, High-road, Ilford, on Aug. 10th, the wife of James Aitken, M.D., of a son.

BOURNE.—On Aug. 7th, at Abbotsfield, Kenilworth, Warwickshire, the wife of Edmund Kemp Bourne, M.D. Ed., of a son.

CAPPER.—On Aug. 13th, at Tunbridge Wells, the wife of Percy Capper, M.B. Edin., of a son.

CUTTING.—On Aug. 11th, at Chetwynd House, Stalham, Norfolk, the wife of Ernest Buxton Cutting, M.R.C.S., L.R.C.P., of a son.

GODSON.—On Aug. 12th, at Sharsted, Westgate-on-Sea, the wife of Clement Godson, M.D. Aberd., C.M., of Grosvenor-street, London, of a son.

PARTRIDGE.—On Aug. 10th, at Albany-road, Camberwell, S.E., the wife of W. T. Partridge, M.R.C.S., L.R.C.P., of a son.

ROSS.—On July 25th, at Rio Tinto, Spain, the wife of R. Russell Ross, M.B. Edin., of a daughter.

RUSSELL.—On Aug. 9th, at Plas Ian Alltran, Holyhead, the wife of William Fox Russell, M.B. Dub., of a daughter.

WAKE.—On Aug. 10th, at Dartmouth-park hill, N.W., the wife of Chas. Hereward Wake, M.R.C.S., L.R.C.P., of a son.

WESTLAKE.—On Aug. 7th, at Victoria-street, Great Grimsby, Lincolnshire, the wife of Algernon Westlake, M.B. Edin., of a daughter.

WOOLLCOMBE.—On Aug. 6th, at the Crescent, Plymouth, the wife of Walter L. Woollcombe, F.R.C.S. Ed., of a daughter.

WOOLLETT.—On Aug. 5th, at Wymering House, Southwold, Suffolk, the wife of Sidney Winslow Woollett, M.R.C.S., of a son.

YEOMAN.—On Aug. 10th, at Clark's Hill, Prestwich, Manchester, the wife of Stanley Yeoman, M.B, Cantab., of a daughter.

MARRIAGES.

ANDERSON—TETLEY.—On Aug. 6th, at St. Chad's Church, Far Headingley, Leeds, William Anderson, F.R.C.S., of St. Thomas's Hospital, to Louisa, third daughter of the late F. W. Tetley, of Fox Hill, Westwood, Leeds.

WICKHAM—WATKINSON.—On Aug. 7th, at the parish church, Huddersfield, Charles A. Wickham, L.R.C.P., L.R.C.S. Edin., of Elmlea, Willesborough, Kent, to Marion Cassie Watkinson, eldest daughter of Thos. Bond Watkinson, Esq., of Beechwood, Huddersfield.

WRIGHT—GRAY-WILLIAMS.—On Aug. 7th, at Christ Church, Bootle, Willie Eustace Merle Wright, L.R.C.P., L.R.C.S. Ed., to Mary (Minnie) Gray-Williams.

DEATHS.

HARRIS.—On Aug. 5th, at the Medical Superintendent's House, Infirmary, East Dulwich, Ruth Elwin, only child of Herbert Elwin and Edith Harris, aged 1 year 9 months.

NEWLAND.—On Aug. 8th, at his residence, Raglan-road, Dublin, Robert Newland, M.D., in his 79th year.

ROBBS.—On Aug. 13th, at Bournemouth, William Edward Robbs, M.B. Lond., J.P., of Powis-square, W., aged 64 years.

STRATTON.—On Aug. 8th, at Nevern-square, S.W., Brigade-Surgeon John Proudfoot Stratton, M.D. Aberd., Indian Medical Service (Retired), aged 66.

WELCH.—On Aug. 7th, at Hackney-road, Charles Welch, L.R.C.P. Ed., M.R.C.S., in his 77th year.

YELDHAM.—On Aug. 10th, at St. Leonards-on-Sea, Stephen Yeldham M.D., M.R.C.S., in his 85th year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

"THE LANCET" AND ACCIDENT INSURANCE.

A LITHOGRAPHED CIRCULAR LETTER, emanating from an office in the Strand district, is being sent to members of the medical profession, offering to supply them with THE LANCET, in conjunction with an accident insurance policy. The Proprietors of THE LANCET are in no way connected with the scheme (of which they cannot approve), and were not aware of its inception until their attention was called to it by a reader who had received the circular.

"A NEW APPOINTMENT AT THE MIDDLESEX HOSPITAL."

IN our issue of last week we commented upon certain remarks which had appeared in the lay press relative to the recent appointment at the Middlesex Hospital. At the same time we expressed our assurance that the paragraph in question had been inserted without the knowledge or leave of the subject of it. We have received confirmation of this view from the gentleman in question, who remarks in addition that the paragraph was grossly incorrect. It is hard that a medical man should have to suffer from such an annoyance, and he has our sympathy.

Mr. Lennox Browne.—We have referred the suggested correction to our reporter, who finds that it constitutes a fuller account, but not a different one from that which we have published, while it leaves untouched points to which reference was made.

"THE DANGERS OF COCAINE."

To the Editors of THE LANCET.

SIRS,—Since reading your annotation on the "Dangers of Cocaine" in THE LANCET of July 6th I have had a case which illustrates the haphazard way in which this drug is used.

I was called in by a dentist to see a patient who, I found, had the following symptoms. She was unconscious and almost pulseless, respiration rapid, pupil dilated and fixed, and there was absence of conjunctival reflex. The dentist stated that he had injected cocaine and extracted two teeth. On being asked how much cocaine he had used, he said "one tabloid," and on referring to his stock he found that each tabloid contained half a grain. He stated that he was convinced that the collapse was not caused by cocaine, as he had recently used a hypodermic injection of seven tabloids (3½ gr.) in another case. The patient slowly recovered consciousness after hypodermic injections of ether and inhalation of nitrite of amyl, but suffered during the rest of that day and the next from giddiness, headache, and general lassitude. The dentist, she stated, had advised cocaine. She suggested that he should have a medical man present, as she believed she had a weak heart. The dentist assured her that it was not at all necessary, as there was no danger associated with cocaine.

I am, Sirs, yours faithfully,

Aug. 12th, 1895. J. J. WALLACE, M.B.R.U.I.

UNQUALIFIED PRACTICE.

To the Editors of THE LANCET.

SIRS,—After six years spent in a distant colony I have just returned to my native land expecting to find certain abuses swept away, and that owing to the disappearance of the unqualified assistant more scope for the duly registered man would be found. During the few days I have spent in England, however, my hopes have received some rude shocks; for although a system of careful "covering" is followed, yet unqualified practice seems to be carried on to as great an extent as ever it was. It is not so much the case of the hard-working general practitioner who keeps an assistant to do his dispensing and attend to trivial cases at the surgery of which I complain, as the case of the gentleman who, having been in good practice for a great many years and having the outward signs of prosperity, holding good county appointments and even high office under what should be our greatest protecting association—it is against the style of practitioners whom one might reasonably expect to set a worthy example to other members of the profession that my complaint is directed: one who lives in semi-retirement and keeps his assistant down the street to do midwifery and night work and can be trusted to call in his principal in time to sign the death certificate. In the colony in which I have been resident the unqualified assistant does not exist. Quacks abound, but they dare not pass themselves off as medical men, and it seems to me that the business of these men is honest and straightforward in comparison with that above alluded to.

Is it not a burning shame, Sirs, that men who have worked hard and spent large sums of money in passing examinations should be driven out of their own country owing to this unfair form of competition? I trust we shall see an agitation started which will not cease until the unqualified assistant entirely disappears from our midst.

I remain, Sirs, your obedient servant,

July 23rd, 1895. JUSTITIA.

*** Our correspondent details a procedure against which the General Medical Council is always ready to act. We are not ignorant that improper use is still made of unqualified assistance; we regret it, and may be depended upon always to do our best to check it. The particular methods alluded to by our correspondent would meet with the condignest punishment at the hands of the General Medical Council if its occurrence were duly authenticated before them.—ED. L.

"THE TITLE OF 'DR.'"

To the Editors of THE LANCET.

SIRS,—Many medical men can doubtless sympathise with "M.D." in his amusement at the "title of 'Dr.' question," as well as in his defence of his old university. Degrees and diplomas must differ under the present cumbrous twenty-barrelled examining system; but invidious comparison can only succeed in "fouling our own nest." Though the question is amusing to "M.D.," to me it is irritating. It is not exactly a sore, but it is a chronic desquamation with a tendency to itching. Why should it not be settled once for all? This could be done (1) by a consensus of the qualifying bodies, or (2) by obtaining the highest legal opinion, or (3) by means of a friendly legal action, the expense of which could be defrayed by subscription. I have repeatedly contended in your columns that the title is one of courtesy, and the using or not a matter of personal taste guided by prevailing customs and ancient usage. In so contending I have expressed my own opinion, but have always been open to correction and willing to allow to others the same freedom of judgment on a point as yet undecided. If my suggestion should lead to a final decision future irritation may be avoided, and the medical "odium" of boasting and depreciation with regard to degrees and diplomas may at least be mitigated. I am, Sirs, your obedient servant,

Loughborough, Aug. 9th, 1895. J. B. PIKE.

To the Editors of THE LANCET.

SIRS,—I hold the diplomas of the Conjoint Board and am also a Doctor of Philosophy of —— University. Am I at liberty to style myself Dr. A—— B—— on my door-plate?

I am, Sirs, your faithfully,

A—— B——.

*** We think not. The non-medical degree is quite a creditable one, but should not be prefixed to the name on a door-plate, presumably displayed for professional purposes. We refer to this query in a leading article in our present issue (vide p. 412).—ED. L.

PROPER FACILITIES TO THE CORONER.

To the Editors of THE LANCET.

SIRS,—Is the medical man bound to answer questions asked by the coroner previously to an inquest without being summoned? Or can he legally refuse to give any information relative to the case until he is summoned to do so at the inquest?—I am, Sirs, yours faithfully,

Aug. 12th, 1895. MEDICUS.

*** A witness is not bound to answer any questions until he is summoned and is present in court; but a medical man would be very ill-advised not to give a coroner previously to the inquest every proper information within his power.—ED. L.

ALCOHOLISM *versus* PARACHUTISM.

To the Editors of THE LANCET.

SIRS,—From an annotation in THE LANCET of Aug. 10th, p. 340, I see that a Congress for combating the Abuse of Alcoholic Liquors is to be held at Bâle, where the subject is to be dealt with "not so much by extremists who see nothing but evil in alcohol, as by those who can separate the use of it from the abuse"; also that in Bâle in 1893 of the deaths of males between the ages of forty and fifty "every fourth man died of drink." On p. 343 you allude to the fatal parachute accident at Peterborough, and have no difficulty in concluding that "this sort of exhibition ought not to be allowed. The making of money out of a morbid propensity on the part of people ..... should be made a punishable offence," and you heartily approve of the rider of the jury: "That since no useful purpose is served by these senseless exhibitions ..... they should be made illegal." These two paragraphs lead me to ask, in all humility: 1. Is taking people's money for gratifying their "morbid propensity" in the direction of parachute descents any worse than taking their money for gratifying their "morbid propensity" for alcoholic excitation? 2. In relative cost and consequence is not the "morbid propensity" for alcohol a hundred thousand times worse than that for parachute descents? 3. If these are to be made illegal because they involve risks and are devoid of utility, is not the public sale of alcoholic liquors condemned by the same proposition? 4. Is a "conference" on alcoholism on the lines given by you not as much a foregone conclusion as would be a "conference" on parachute descents by those already committed to parachutism?—I am, Sirs, yours faithfully,

Aug. 12th, 1895. C. S.

*** We have a feeling that our correspondent is pledged to regard the temperance question from one point of view, so that it is not likely that he will be free to see things as we see them. But we answer his queries:—1. The gratification of one morbid propensity is as wrong as the gratification of another. But all use of alcohol is not morbid or practically purposeless; while all gaping at exhibitions whose single interest arises from their danger to another's life is both morbid and practically purposeless. 2. In our opinion, no. The relative costs or consequences are difficult of estimation when we think for a moment of the number of persons using alcohol compared with the number of parachutists. It is not very clear what our correspondent means here by "morbid propensity." Drunkenness costs a people a great deal in moral and material wealth, but that is denied by no one. 3. Certainly the public sale of alcoholic liquors is not condemned or condemnable by the comparison we are asked to institute. 4. We desire to credit those workers at the temperance question who do not see in total abstention the only solution with impartiality and quite as much ability to understand facts, foresee difficulties, or draw conclusions as is claimed for the complete tectotal party.—ED. L.

F.R.C.S.—The quack in question so far protects himself by pretending to be only an M.D. of the United States. As such the General Medical Council has no control over him or his ways. If the Public Prosecutor or the police did their duty such a fraud would not be allowed to go unpunished.

Dr. F. P. Atkinson is thanked for his communication.

THE TENURE OF THE APPOINTMENT OF A POOR-LAW MEDICAL OFFICER.

To the Editors of THE LANCET.

SIRS,—Must the appointment of a Poor-law Medical Officer, if not resident in the parish, be limited to one year? and if limitation exists, why so? I am, Sirs, yours faithfully,

Aug. 13th, 1895. INQUIRER.

*** The Medical Appointments Order, May 25th, 1857, Article 4, enacts that "if the guardians shall elect a district medical officer ..... not residing within his district ..... the guardians shall employ as a district medical officer such person not residing within his district ..... for such time only as the Poor-law board shall approve of or direct." This does not apply to London, and the reason for the provision for re-election seems to be that there must be a point where non-residence would make the officer useless, and the necessity of submitting himself from time to time for re-election would preclude this difficulty. The usual practice of a board is to sanction the employment for a period of three years only.—ED. L.

A QUERY.

To the Editors of THE LANCET.

SIRS,—Will some of your readers kindly inform a middle-aged practitioner where he can be suitably coached or instructed theoretically and clinically during a course of some nine or twelve months for the final M.B. Examination of the London University?

I am, Sirs, yours faithfully,

Aug. 12th, 1895. CIVIS COLONIÆ.

CONSULTATIONS IN CLUB PRACTICE.

To the Editors of THE LANCET.

SIRS,—I am attending a club patient and have attended him for nine weeks; he is getting better and has had a good deal of attendance. At the end of that time his employers, large manufacturers, write asking me if I will meet their medical man in consultation over the case. I meet him, and send in my account to them for that consultation. I have a letter from them two days after expressing their surprise at my making any charge whatever. I should be extremely obliged if you will tell me whether I am right in exacting a fee from them.

I am, Sirs, yours faithfully,

Aug. 13th, 1895. M.R.C.S.

*** Our correspondent is certainly right, on the facts as stated to us, in demanding a fee for the consultation. Such a consultation formed no part of the routine of his club practice, and was, we presume, undertaken entirely in the interests and at the instigation of the patient's employers.—ED. L.

B.—So many union appointments are held and their duties efficiently discharged by gentlemen who for one reason or another are compelled to live far from the centre of their districts that we do not think our correspondent can found any strong claim to the post occupied by a fellow practitioner on the plea of greater geographical convenience; but if real hardship has arisen to the poor, the guardians should know, and should know what to do. We cannot recommend our correspondent to take any active steps in the direction himself.

THE MEDICAL DIGEST.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of July 13th, 1895, p. 92, a case of persistent hiccough is reported to be cured by the use of snuff; and at p. 93 the coryza caused by iodide of potassium is reported as preventable by the simultaneous exhibition of tincture of belladonna. In both instances the remedy is so described as to suggest that it is an original idea. In the "Medical Digest," Section 962:5, the value of sternutatories in hiccough was described in 1886, as well as the value of tickling the nostrils. The use of belladonna in counteracting the ill-effects of iodide of potassium was known in 1885, as a reference to Section 253:2 of the Digest will show.

I am, Sirs, yours truly,

Boundary-road, N.W., Aug. 9th, 1895. RICHARD NEALE, M.D. Lond.

C. L. G. M.—It is usual for the graduates of the Edinburgh schools to affix "Ed." or "Edin." to their abbreviated titles. There is no official list of abbreviations, so that there is no right or wrong in the matter; but to affix "E." only is to breed confusion. In the particular instance given by our correspondent no confusion can arise, for there is no need for such an affix as "M.R.C.S.E.," the Royal College of Surgeons of Edinburgh not bestowing membership.

WANTED SUGGESTIONS FOR TREATMENT.

To the Editors of THE LANCET.

SIRS,—I want suggestions for the treatments of a case of obstinate and long-continued constipation. All sorts of drugs have been tried, also faradaism and massage. The chief symptoms are occasional, sometimes extreme, flatulence; mucoid, jelly-like material hawked up at times; sometimes heart-burn; stools generally hard and dry, generally dark in colour, sometimes too light, very rarely quite normal, when immediate amelioration of symptoms follows; very good appetite, but no proper assimilation of food; complexion sallow, habit of body spare. I shall be very much obliged if you can find a corner for this, and if any of your readers can give me the information I require.

I am, Sirs, yours faithfully,

Aug. 12th, 1895. M.D.

Nurse Alice.—Our correspondent will find in the Medical Directory the information she desires. We cannot recommend any particular place to her.

R. G. J., Capt. S., and *X. Y. Z.*—We do not prescribe, recommend treatment, or suggest the names of individual practitioners.

TALC SHIELD PROTECTOR IN DIPHTHERITIC CASES.

To the Editors of THE LANCET.

SIRS,—Dr. Dowding's ingenious contrivance of talc shield associated with tongue depressor as a protector of the operator in diphtheritic cases, figured in THE LANCET of Aug. 3rd, suggests even a more simple contrivance—namely, a circular piece of talc about three inches in diameter, pierced in the centre by a small flat button with screw or socket end, into which should be passed a stem of vulcanite or other light substance, flattened at the end, to be held in the operator's mouth during examination &c. Both nose and mouth would thus be protected, and perfect freedom in the use of instruments secured.

I am, Sirs, yours faithfully,

Brighton, Aug. 12th, 1895. J. DENNANT, L.D.S. Eng.

GERMAN UNIVERSITY DEGREES.

Medicus would have to pass his examinations in Germany, but if practice in that country is contemplated the mere M.D. of a German university would be of no more use than an English degree. The State Examination, which is severe, must be passed, and if leave is granted, as it generally is, residence at a German university is unnecessary.

A Registered Student in Medicine should consult the physicians of the hospital at which he is studying.

ERRATUM.—In the list of successful candidates for the D.P.H. Lond., published on page 383 of our last issue, the name of one of the successful candidates was not "Wm. Wyatt Shrubsall," but *W. W. Shrubshall.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Aug. 15th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Rad'n in Vacuo	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Aug. 8	29·85	W.	60	56	119	73	53	0·07	Hazy
,, 9	29·71	S.W.	66	63	117	74	58	0·23	Overcast
,, 10	29·79	S.W.	65	62	108	75	60	0·04	Cloudy
,, 11	29·67	S.W.	63	60	113	71	60	0·85	Cloudy
,, 12	29·79	S.	60	58	112	71	55	...	Cloudy
,, 13	29·74	S.	59	58	87	64	56	0·11	Overcast
,, 14	29·93	W.	63	59	118	72	54	0·41	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

During the week marked copies of the following newspapers have been received:—*Manchester Guardian, Newcastle Chronicle, Freeman's Journal, Birmingham Gazette, Eastern Morning News, Bradford Observer, Scotsman, Heckmondwike Reporter, Blackburn Standard, Kendal Mercury, Newbury Weekly News, Birmingham Mail, Sheffield Telegraph, North British Daily Mail, Belfast Evening Telegraph, Sussex Daily News, Derby Daily Telegraph, Royal Cornwall Gazette, Dundee Weekly News, Whitehaven Herald, Chester Courier, Rochdale Observer, Western Daily Mercury, Umpire, Brighton Gazette, Times of India, Architect, Morning, Pioneer Mail, Leeds Mercury, City Press, Builder, Yorkshire Post, Sanitary Record, Bristol Mercury, Liverpool Daily Post, Norfolk Daily Standard, Public Health, Local Government Chronicle, Reading Mercury, Weekly Free Press and Aberdeen Herald, Mining Journal, Middlesex Standard, Hertfordshire Mercury, Surrey Advertiser, Guy's Hospital Gazette, Local Government Journal, Pool Herald, Banbury Guardian, Glasgow Herald, Ilkeston Pioneer, East Cumberland News, Maidstone Journal, Dumfries Standard, Croydon Guardian, Banffshire Journal, Kentish Press, Andover Advertiser, Bath Gazette, &c., &c.*

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